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MACFORMAT

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MACFORMAT

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The Finder

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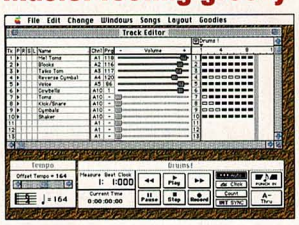
Last issue we showed you how to turn your database into a personal information manager. This issue we explain how to find and display data, and use macros to speed things up.

AppleScript: automate your life 76

Use AppleScript to automate those repetitive, boring Finder tasks. It's easy when you know how.

Music: feeling groovy 78



Do your music tracks sound lifeless? Like they're missing that vital groove element? The solution: spice up your drum tracks. Here's how.

Desktop printing on *your* Mac 80

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WIN! WIN! WIN!

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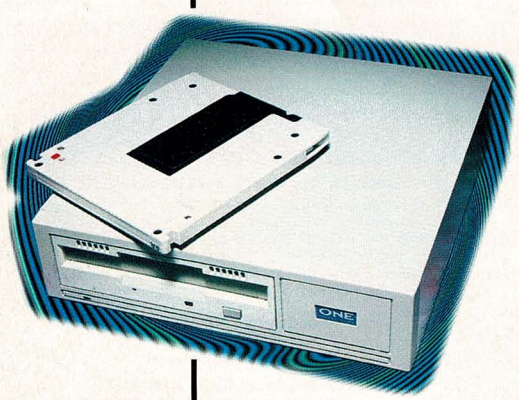

Imagine two CD-ROMs' worth of storage space, on a handy readable, writable, replaceable cartridge that you can pop out and carry around. That's the ONE Technologies 1.3Gb magneto-optical drive, and we have *three* to be won, worth a cool £2,464 in total, courtesy of Disc Direct.

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3D comes to life and leaps off the page into the real world! Turn straight to this page to learn all.

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YOUR COVER DISKS

MACFORMAT comes with a choice of CD-ROM or high-density HD Disk every issue:

Your CD-ROM 8
A *complete* version of *VIDI Presenter Pro*, plus demos of four other 3D packages and QuickDraw 3D itself. Demos of 3D racing game *Havoc, Magic Tales* and 25 images from the *ClickART Incredible 25,000 Image Pak*. Plus, over 100Mb of top-notch shareware and everything below...

Your Cover Disk 12
Short Circuit and *SingleNumber* – addictive puzzle games. Create standalone documents with *DOC-Maker 4.1*, and catalogue your disks without fuss with *Disk Wizard*. Plus handy icons and utilities.

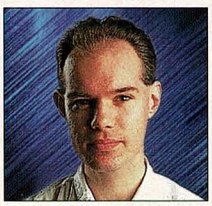
Welcome to MACFORMAT

Everything you wanted to know about MACFORMAT, plus some thoughts on what QuickDraw 3D could do for us.

ABOUT OUR WRITERS

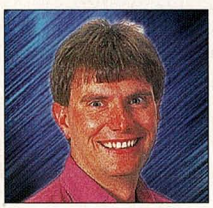
ALEX SUMMERSBY

Our Editor learned about Macs by using them, mainly to produce magazines like this one. Now that QuickDraw 3D offers the possibility that *any* program can go 3D, he's awaiting 3D DTP so he can flip through the pages of a virtual magazine.



RICHARD HILL

Our News Ed says he'd like to use 3D in the mag to explain ideas and stories with 3D models and diagrams you can explore at will. And, he adds, 'I'd also like to use 3D on the Web, so that as I gather the news I can see it from all sides.'

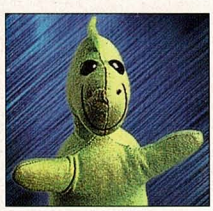


COLIN DALZIEL

Our Disk Editor has come up with this great idea for Kai-Krause-style rotating 3D icons that do different things depending on where you click on them. They'd take up much less desk space, he says. Mind you, they'd also drive you barmy.

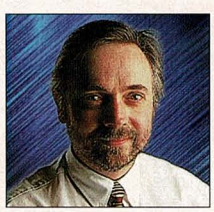
LINDSAY BRUCE

Our still-new Technical Writer from Scotland is about to resort to a 3D program to make himself somewhere to live... And if he can't sleep, he can just watch his Mac rendering any four polygons and a texture map in under 32Mb of RAM.



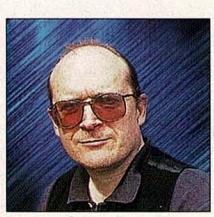
DEREK SMITH

Our very technical Derek says: 'I'd like a 3D Unix interface like the one running on the Quadra 700s in *Jurassic Park*. (My cousin had a stomp-on part in that.) Alternatively, a *Marathon 3D* that would put the Sony PlayStation to shame.'



ROD LAWTON

After AppleScript and databases this issue, our productivity specialist has some 3D projects in mind: design a playroom for small children that has an entrance but no exits. Or a Mac interface where you can get between the windows.



BRIAN LARKMAN

Brian teaches computer graphics at a college in the North, and 3D is one of the great loves of his life. He wrote a tutorial series on it in MACFORMAT issues 21 to 26. He started to tell us what he'd like to do, but we seem to have run out of room.

ABOUT MACFORMAT

Welcome again to MACFORMAT, Britain's best-selling Macintosh magazine! Every issue we bring you:

- Tips, techniques and tutorials covering the range of Mac applications, from graphics, spreadsheets and databases to music, multimedia and games.
- Features about exciting Mac developments and novel uses, accompanied by Cover Disk programs whenever possible, so you can discover what your machine can do and try things you mightn't have tried before.
- All the latest Mac-related news, plus all you want to know about the wider issues, the people behind the headlines and the stories behind the stories.
- Authoritative reviews of interesting and affordable products, with clear buying recommendations.
- Cover Disks and CD-ROMs with demos so you can try software before you buy, useful utilities (specially chosen to complement features in the magazine), selected shareware programs, games, readers' contributions and much more.

Whether you're a veteran or a novice, we'll help you get more out of your Macintosh, whatever you use it for.

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MACFORMAT *does not review demos or unfinished programs.* We review only the finished products you could buy yourself, to help you decide whether to buy or not. We give clear buying recommendations, and rate products on this scale:

- 80+% means excellent.
- 70+% means well worthwhile, though not really outstanding.
- 60+% means good, but with a few shortcomings or some limitations.
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- A rating below 50% means you should think carefully before parting with your money.

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If a product earns a rating of 90% or more, we'll give it a MACFORMAT Classic Award. This means what it says: we judge the product to be a classic, a standard-setter of its type, something really special.

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INFINI-D 3.1
£249
Which supports Apple's new technology: QuickDraw 3D™ and QuickTime VR™
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Infini-D 3.1

Infini -D sets the standard for 3D animation and design. Allowing you to quickly add the impact of 3D to any project in either graphic design, illustration, package design, desktop video or multimedia.

Exciting new features include;-

QuickDraw 3D support
Support for the 3DMF file format, both reading and writing.
Support for copy and paste to the clipboard and other applications which support the metafile.
Interactive rendering in modeller and animation preview modes.

Speed Improvements
Optimization for new PowerPC 604- series chips.
Further speed enhancements for 680x0 and PowerPC 601 series machines.

Spline-Based, Path-Profile Modelling
The new modeller allows the creation of advanced, organic shapes, including path extrusion,spirals,and twisted and tapered shapes.

Improved lighting controls
The new Lighting Floater allows immediate manipulation of lights in a scene.

Velocity control
Infini-D provides a sophisticated tool for controlling the velocity of an object's motion over time.

Texture locking in surface composition
This new mapping type allows a surface to conform to an object's motion over time.

Object attribute timelines in the sequencer
Eventmarks can be added and manipulated for the individual attributes of an object , allowing for a much greater degree of animation control.

£586

Collage 2.0.1

The fastest way to compose high-resolution imagery, Collage imports Photoshop™ images and allows you to rapidly combine them into sophisticated compositions.

£280

TextureScape 1.5

The essential texture design and animation tool. Gives an unprecedented amount of control over the creation of synthetic, computer generated images that are tileable and can be rendered at any resolution.

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LogoMotion 2.0

LogoMotion allows you to create stunning 3D animations of text and logos. And includes features like lathe and extrude modelling, editable surfaces, texture mapping,atmospheric effects and professional effects.

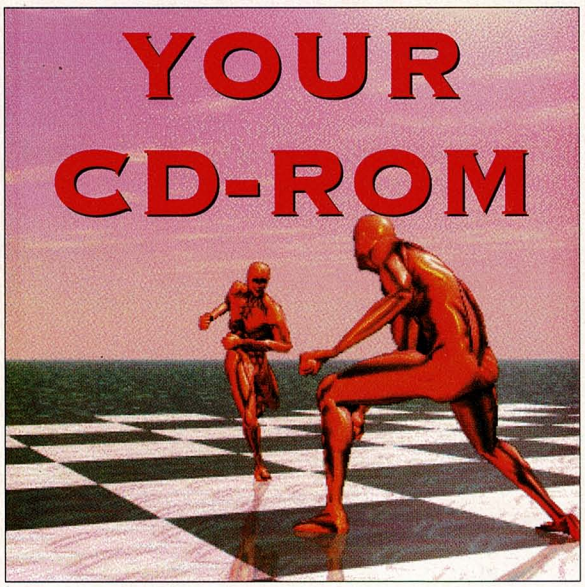
£99

For more information and details on this great family of products please contact:

GOMARK DESIGN

Gomark Limited
10 Hurlingham Business Park
Sulivan Road
London SW6 3DU

Tel: 0171 731 7930
Fax: 0171 736 1215



Like Popeye's biceps after an overdose of spinach, our Cover CD is bursting at the seams. Well, Colin Dalziel's impressed.

To complement the 3D cover feature this issue, the CD is crammed with the best in 3D software. We have no less than five 3D packages for you to try out, including the complete *VIDI Presenter Professional*. Other demos include a playable version of the action packed game *Havoc* and an interactive demo of the wonderful *Magic Tales* series of story books. So load the CD onto your Mac and explore what's in store.

- *VIDI Presenter Professional 3.1:* a complete, top quality 3D studio.
- 3D software: demos of four of the top 3D packages, plus sample models.
- Demos: interactive stories, a 3D game and 25 clip art images.
- Clip photos: 25 top quality high res photographs from the Corel collection.
- Desktop printing: *LaserWriter 8.3*, the software that gives you the power of drag and drop printing. See page 80.
- Floppy: all the software included on this issue's HD Cover Disk.
- QuickDraw 3D: System software that enables you to view QuickDraw 3D images.
- Readers' Corner: the section of the CD reserved for your contributions.
- Resources: essential Mac software, including the latest version of *Software FPU* and a MACFORMAT CD index.
- Shareware City: the latest shareware and freeware from the Internet.
- Shareware in MACFORMAT: all the shareware featured in our shareware pages, which start on page 108.

FLOPPY OR CD?

MACFORMAT is available in two editions: this issue, one with a CD-ROM and one with a high-density floppy disk. Details of the floppy programs are on page 12. The CD contains all the software that's on the HD Cover Disk in a folder called Floppy.

PROBLEMS?

If you have problems quitting any of the rolling demos on the Cover CD, just press **[command] [Q]** and you should go back to the Finder. If this doesn't work, press **[command] [option] [escape]** to Force Quit.

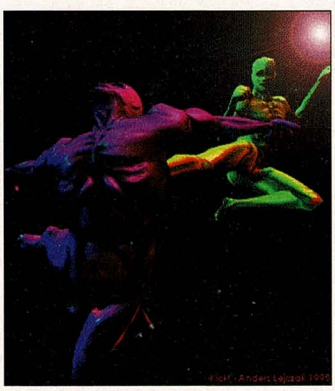
Readers' Corner

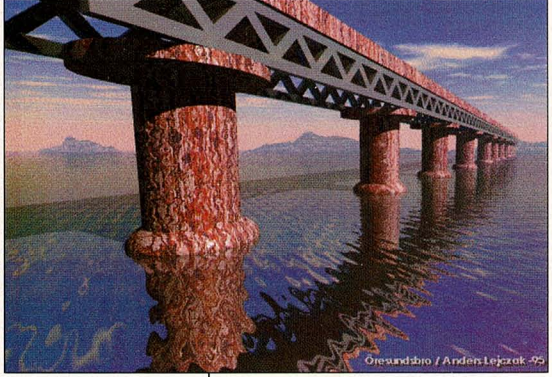
Your contributions

Requires: see individual Read Me files

The section devoted to your work is yet again bursting at the seams with art and software. This issue prizes of Adobe's *Wild Type* are winging their way to Roger Naylor and Anders Lejczak for their excellent 3D graphics creations.

If you fancy your chances of winning a prize, then send in your contributions to: Disk Editor, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW. Even if you don't win a prize you still get to show off your work to thousands of MACFORMAT readers.



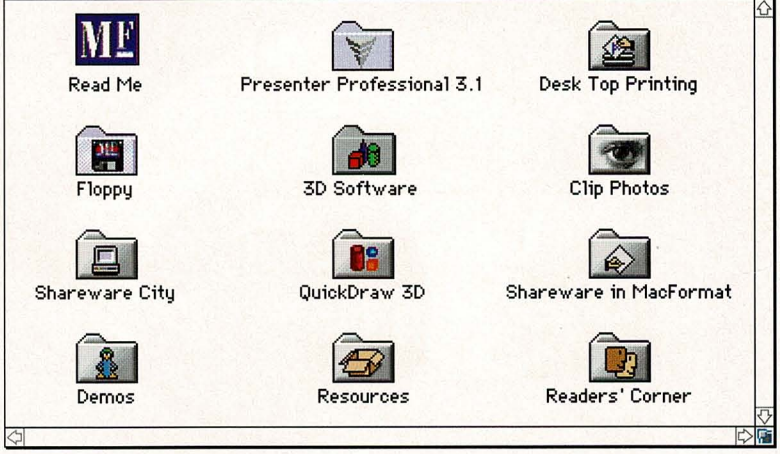


MACFORMAT readers join in the 3D creation with some stunning images.

MacFormat 34

Over 630Mb

Over 3,500 files of programs, utilities, clip art, shareware, demos and much, much more



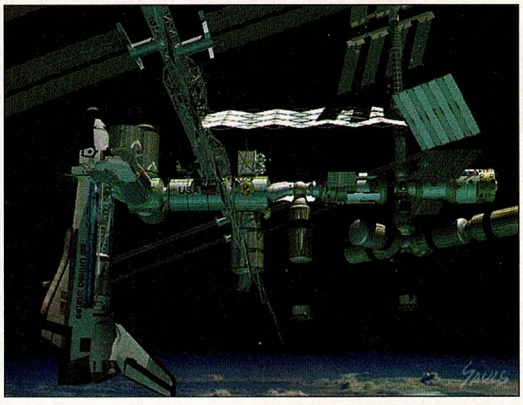
VIDI Presenter Professional 3.1

Complete 3D modelling and rendering package

Requires: Quadra or better, 8Mb of RAM, System 7 or later

Presenter Pro is one of the most complete 3D visualisation packages available on the Mac. The program is based around a virtual stage, which gives you complete control over lighting, object positioning and movement, and camera placement. Included in the package is an effects library containing movie clips and a selection of animation, as well as textures and shaders. To get you started there's an extensive set of tutorial files, designed to take you from complete novice status and give you all the training you need to produce stunning works of art. The package is not only suitable for 3D work, but you can also prepare slick slide show presentations.

This is a fully working package – it's not even save disabled. The only restriction is that the maximum file size you can create is 100K, and the biggest image you can render is 320 x 240. For a guide to getting started, turn to page 54.



Demos

Game, interactive stories and clip art

Requires: see individual Read Me files

In *Havoc,* the all-action 3D game, mayhem awaits. You speed across the barren Badlands in your all-terrain vehicle, on your mission to find three gate keys and get through the gate which takes you onto the next level. Along the way you must pick up weapons, replenish your shields, destroy your enemies and generally blast everything in sight.

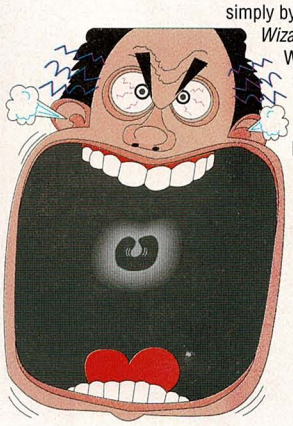
For a much steadier pace of life, take a look at the wonderful *Magic Tales* storybook demo. The stories are brought to life with animation and interaction, and encourage you to take an active part in the tales. The full reviews are on page 98.

Clip art is a convenient way of sprucing up your work with simple images. This issue we've included a sampler on the CD, which gives you 25 images from ClickART's *Incredible 25,000 Image Pak* (see page 90).

Take out all your aggression and frustration on your enemies in the 3D mayhem that is *Havoc* (above). Once you've finished, settle down with a quiet, gentle *Magic Tale* or two (left).

CD INDEX

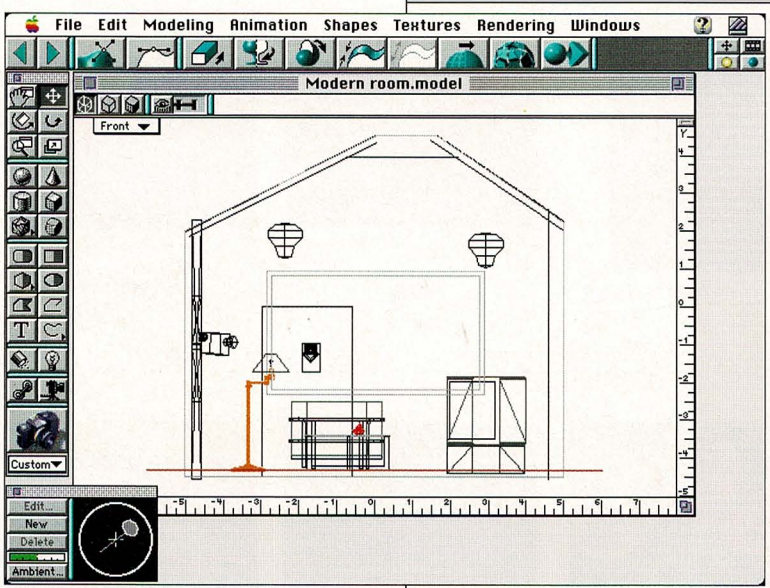
In the Resources folder is a complete index of MACFORMAT Cover CDs created using the shareware application *Disk Wizard.* To use the index simply place your Wizard folder into the Preferences Folder, which is in your System Folder. You can then view the index simply by opening *Disk Wizard.* The Wizard folder is over 8Mb, which may seem rather large, but it does list over 131,000 files!



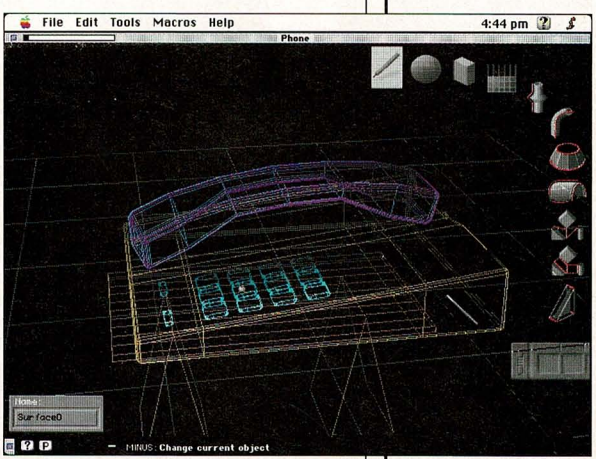
3D software

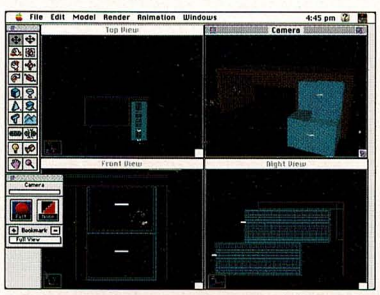
3D graphics software

Requires: see individual Read Me files



Each of the 3D packages on the Cover CD has its own distinctive interface and tools for you to put to the test before you invest.





If you are thinking of investing in 3D software, take a look at the four demos on the Cover CD first. This collection gives you the chance to try out the features of each of these top graphic packages before you part with your hard-earned cash.

Amapi 2 breaks the mould as far as interface design is concerned. This innovative package's tools take a little while to get to grips with, but once mastered they give you excellent control of the components that make up your scene. *Infini-D 3* gives you the power to construct 3D images using an intuitive interface. With its simple toolbox features, this intuitive package is quick to learn and gives a wide range of features to explore.

Studio Pro 1 (for standard Macs) or *Studio Pro 1.5.1* (for PowerMacs) is a real heavy-weight in the 3D world. You'll need some knowledge of 3D to tackle the wide range of tools this powerful package places at your disposal, but once you've mastered *Studio Pro,* you'll be able to generate truly stunning art work and animation.

3D World is one of the first 3D rendering programs to be built around Apple's QuickDraw 3D technology. It enables you to produce 3D graphics at a speed previously only possible with a high end graphics workstation. Before you can use *3D World* you'll have to install QuickDraw 3D, which is also included on the CD.

All of the demos in the 3D section include sample images or models, and to help you explore the 3D software further are five 3D models in DFX format from Viewpoint Datalabs. These models are from the Viewpoint catalogue of prebuilt 3D models.

CUSTOM ICONS

The icons we use on the CD help to give it a friendly atmosphere, but they do slow it down. Install *CDIcon-Killer,* which is in the Resources folder on the CD, if you want to speed things up.

Continued on next page

Clip photos

This issue we bring you 25 nature oriented clip photos from the Corel collection.

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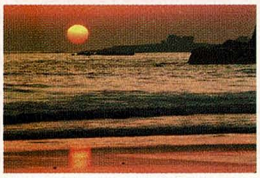
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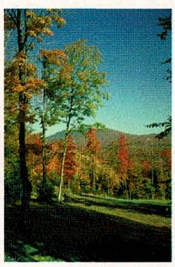
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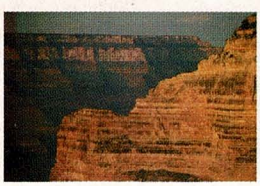
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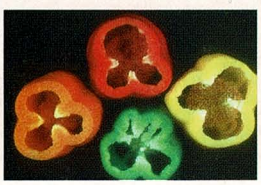
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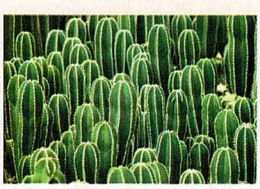
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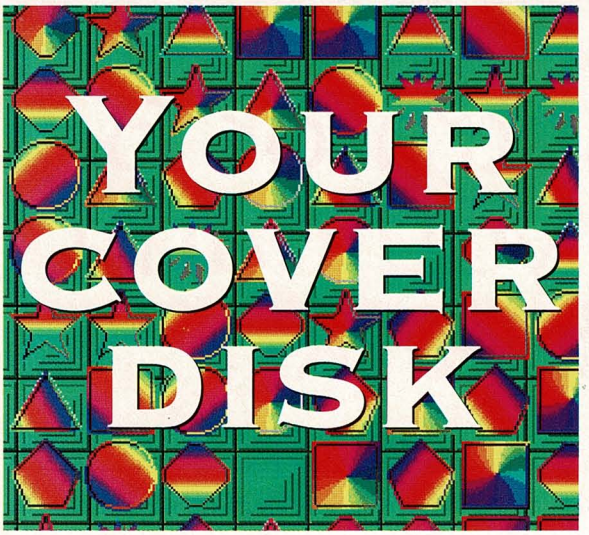
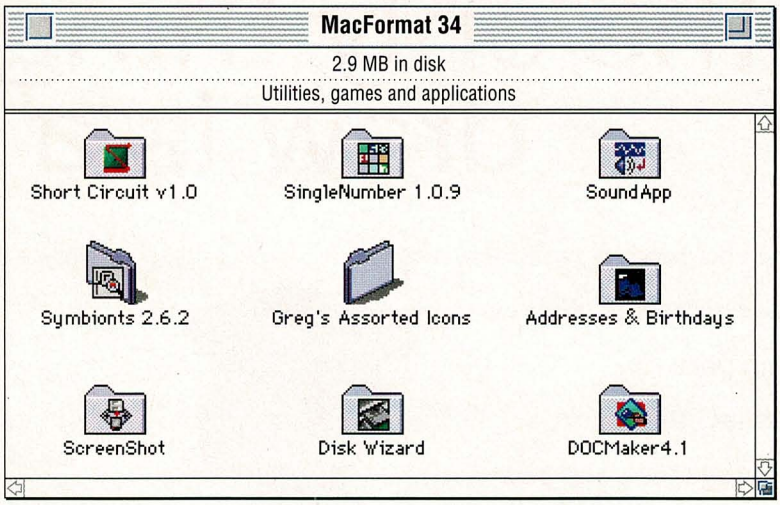


A rich full-bodied blend of ingredients from around the world perfectly combine to form this issue's Cover Disk. Colin Dalziel puts his feet up and takes in the aroma.



This issue we have some truly addictive games for you to get stuck into, plus utilities that brighten up your Desktop, capture an image of your screen, and convert a whole range of sound files. If you want to create standalone documents or catalogue hundreds of disks, we've also thought of you. Read on to find out more about what we've crammed onto the disk.

START HERE

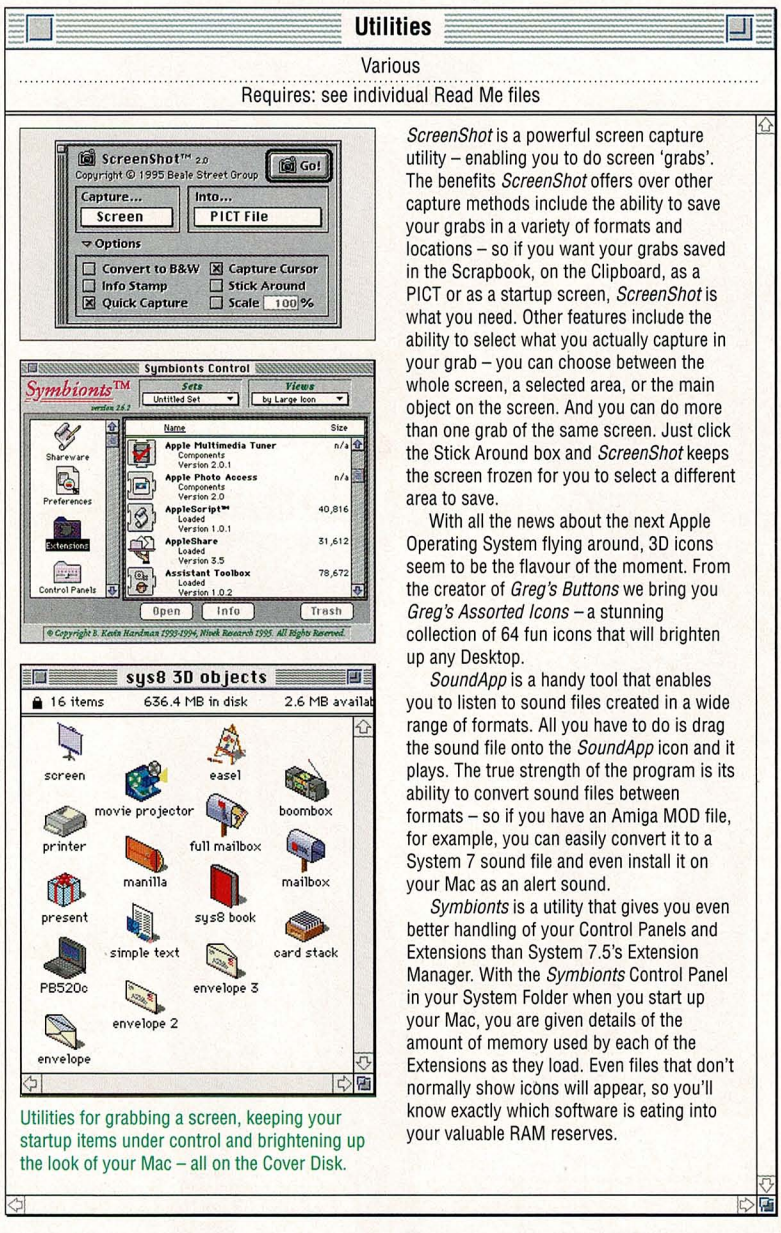
High density floppy disks normally contain up to 1.4Mb of software, but to bring you as much as possible, we use a compression program to fit more on. So you need to decompress the software before using these disks, and this issue you'll need 2.9Mb of hard disk space. We also recommend that you always make a backup of the MACFORMAT Cover Disk, just in case anything goes wrong. Here's what to do...

1 Ensure the original Cover Disk is write-protected (move the tab so that you can see through the hole).
2 Insert the MACFORMAT disk.
3 Drag the Disk's icon over your hard disk's icon.
4 The contents are copied onto your hard disk, but are still compressed and cannot be used yet.
5 Drag the Cover Disk icon to the Wastebasket to eject the Disk.
6 Insert a blank high density disk.
7 Drag the MACFORMAT 34 folder from your hard disk onto the blank disk's icon to make your backup.

To decompress the Cover Disk, open the MACFORMAT 34 folder on your hard disk.
1 Double-click on the MACFORMAT 34 icon.
2 Click **Continue**.
3 A box then asks you where you want to save the software. Choose the place on your hard disk where you want everything stored and click **Save**.

Before installing the Cover Disk, we always recommend that you back up any important work on your hard disk. This precaution will avoid problems should it transpire that any of the software isn't compatible with your setup.

We make every effort to check our Cover Disks for compatibility and viruses, but the information here is intended as a guide only, and MACFORMAT cannot be held responsible for any damage to data, any inability to use this software or any resulting losses. So please, take the precaution of backing up first.



Utilities for grabbing a screen, keeping your startup items under control and brightening up the look of your Mac – all on the Cover Disk.

ScreenShot is a powerful screen capture utility – enabling you to do screen 'grabs'. The benefits *ScreenShot* offers over other capture methods include the ability to save your grabs in a variety of formats and locations – so if you want your grabs saved in the Scrapbook, on the Clipboard, as a PICT or as a startup screen, *ScreenShot* is what you need. Other features include the ability to select what you actually capture in your grab – you can choose between the whole screen, a selected area, or the main object on the screen. And you can do more than one grab of the same screen. Just click the Stick Around box and *ScreenShot* keeps the screen frozen for you to select a different area to save.

With all the news about the next Apple Operating System flying around, 3D icons seem to be the flavour of the moment. From the creator of *Greg's Buttons* we bring you *Greg's Assorted Icons* – a stunning collection of 64 fun icons that will brighten up any Desktop.

SoundApp is a handy tool that enables you to listen to sound files created in a wide range of formats. All you have to do is drag the sound file onto the *SoundApp* icon and it plays. The true strength of the program is its ability to convert sound files between formats – so if you have an Amiga MOD file, for example, you can easily convert it to a System 7 sound file and even install it on your Mac as an alert sound.

Symbionts is a utility that gives you even better handling of your Control Panels and Extensions than System 7.5's Extension Manager. With the *Symbionts* Control Panel in your System Folder when you start up your Mac, you are given details of the amount of memory used by each of the Extensions as they load. Even files that don't normally show icons will appear, so you'll know exactly which software is eating into your valuable RAM reserves.

GOT A PROBLEM?

If either your cover-mounted high density disk or CD-ROM is defective, return it to us and we will replace it. Please make sure you have followed the installation procedures described in these pages correctly, to ensure that there is a physical problem with the disk itself. Otherwise, the replacement will be just the same!

Return HD disks to:
Discopy Labs
PO Box 21
Daventry
NN11 5BU

Return CD-ROMs to:
MACFORMAT CD returns
Future Publishing
FREEPOST (BS4900)
Somerton, Somerset, TA11 6BR

Enclose a self-addressed padded envelope (but we'll pay return postage) with the disk or CD, and a description of the fault. Please do not return disks or CDs to the editorial office; we don't hold any stocks of them and can only refer you to the addresses above.

Short Circuit

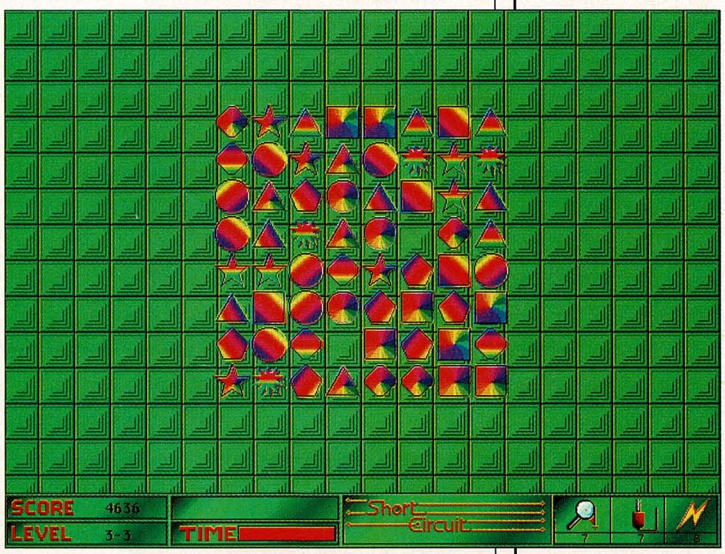
Puzzle game

Requires: colour Mac, 4Mb of RAM, System 7 or later, 13-inch monitor

Short Circuit is an action puzzle game demanding quick thinking. Your goal is to clear the board of coloured tiles before your time limit runs out. To remove the tiles you must match them in pairs, but they must also form a circuit that has no other tiles obstructing the path. The path can go around corners, but it can only have up to two right angles, so the connection can be made of up to three straight lines. Got that?

To help you on your way are a few gadgets. An eyeglass shows you where the next pair of tiles are, a red plug enables you to short circuit a pair of tiles together – even if they are on a blocked path – and the electric icon removes a random pair of tiles from the board. The gadgets are helpful, but, of course, there is only a limited supply of these essential tools.

As you move through the levels you must ensure you remove the tiles in a logical order, enabling you to gain access to the other tiles that are spread across the board. You'll also have to be quick off the mark, because the levels become more and more challenging, with an increasing number of tiles, some of which run away just as you try to click on them.



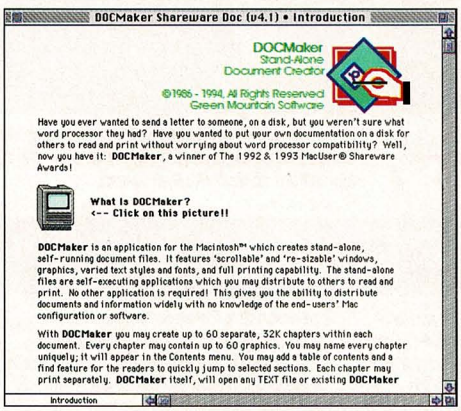
FLOPPY TOO

We are always on the lookout for readers' contributions for the floppy as well as the CD, so don't be put off just because you don't have a CD-ROM drive. Send them in to the address on page 6.

DOCMaker 4.1

Standalone document creator application

Requires: any Mac


DOCMaker Shareware Doc (v4.1) • Introduction
DOCMaker
Stand-Alone
Document Creator
©1986 - 1994, All Rights Reserved
Green Mountain Software
Have you ever wanted to send a letter to someone, on a disk, but you weren't sure what word processor they had? Have you wanted to put your own documentation on a disk for others to read and print without worrying about word processor compatibility? Well, now you have it: DOCMaker, a winner of The 1992 & 1993 MacUser® Shareware Awards!
What is DOCMaker?
<-- Click on this picture!!
DOCMaker is an application for the Macintosh™ which creates stand-alone, self-running document files. It features 'scrollable' and 're-sizable' windows, graphics, varied text styles and fonts, and full printing capability. The stand-alone files are self-executing applications which you may distribute to others to read and print. No other application is required! This gives you the ability to distribute documents and information widely with no knowledge of the end-users' Mac configuration or software.
With DOCMaker you may create up to 60 separate, 32K chapters within each document. Every chapter may contain up to 60 graphics. You may name every chapter uniquely; it will appear in the Contents menu. You may add a table of contents and a find feature for the readers to quickly jump to selected sections. Each chapter may print separately. DOCMaker itself, will open any TEXT file or existing DOCMaker
Introduction

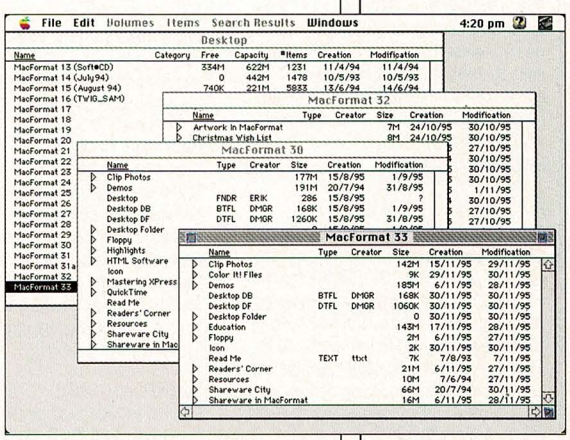
How often do you have to send a document to someone, but you're unsure which word processor they use? And what if you want to include graphics in your file? *DOCMaker* enables you to create standalone files – which means they can run even if the recipient doesn't have the software. You can create documents with up to 60 chapters, each of which can contain up to 60 graphics. You are restricted to a 32K limit to each chapter, but with up to 60 chapters to work with you shouldn't have too many problems. Once you've created your documents all you have to do is save the file, and you have a completed standalone document.

Disk Wizard

Cataloguing utility

Requires: any Mac, System 7

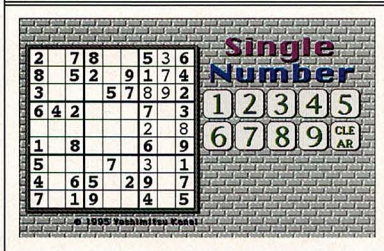
If you have a big collection of disks, this cataloguing software could be one of the most useful programs you've ever seen. You simply insert your disk or CD and the software quickly scans the contents, giving you a complete listing. The details are stored in the Preference files, so whenever you want to find a file in future, all you have to do is a simple search – similar to Apple's Find File – and you can almost instantly locate which disk the file is stored on. You can also use the *Disk Wizard* Control Panel to automatically scan any disk inserted into your Mac – convenient if you want to catalogue your entire disk collection – and all without even having to click a mouse.



SingleNumber

Number game

Requires: any Mac, System 7



SingleNumber presents you with a nine by nine grid, divided into smaller three by three sections. You place a number between 1 and 9 into each of the squares in the smaller sections, but the difficult part is that each number may appear only once on each horizontal and vertical line of the bigger grid. You are given a few numbers to start with, but you'll need a logical mind to complete the puzzle, as well as plenty of patience.

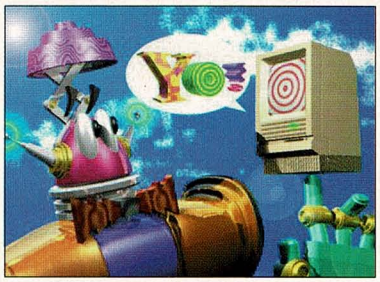
Get ready for a huge phone bill as we launch into a 3D extravaganza, with Web sites where you can get news and free programs, and view some tasty images.

If you've been using the MACFORMAT Web site as a starting point to explore the Web, you'll find it even more useful now. Our own World Wide Web Road Map section has been joined by The Ultimate Macintosh.

This is a jumplist (a page of links to other Web sites) all about the Mac, with over 350 useful places to visit. You'll find lists of the best official Apple sites, archives of free software and shareware, Mac Internet programs, and loads of information on hardware and software. The Ultimate Macintosh is compiled by Michael Yee, and is a completely independent area. It's on the MACFORMAT pages as a mirror site – a duplication of the original page, which is on Michael's computer in California. If you're living in the UK or the rest of Europe you'll find our mirror quicker to use than going through the Internet to the States.

We've also added a selection of 3D-related links to the Road Map area to tie in with our 3D cover feature this issue, and you'll also find dozens of other useful links that offer extra information on subjects you've been reading about in MACFORMAT. If you want to see what all the fuss is about, you'll need an Internet connection through a modem and a service account like CompuServe, Demon, or CityScape, or a direct connection at work or college if you're lucky.

We're now able to see how many people visit FutureNet, because we've recently introduced a system where we ask you to register – don't worry, all details are fully confidential. At the moment we're getting 2,300 new visitors every day, and 167,000 pages are being read every week. **RICHARD HILL**



'Fred's First Computer Lesson' was created by Mitch Anthony using *Ray Dream Designer*. It's one of the images on the User Forum.

'How to Save the World' by David Mattingly – one of the winners of the Specular Art Contest, which you can see on their Web site.

Strata's Web site has a large gallery, including this 'Coffee Pot' picture made by the firm, plus lots of information on their other products.

Getting connected

All you need to connect to FutureNet is a modem and an Internet account like Demon, Maxis On-Line or RedNet, or a direct server connection through work or college. There are no hidden charges – FutureNet is free! Use your World Wide Web browser to connect to

http://www.futurenet.co.uk/

LINKS FOR THIS ISSUE

As well as The Ultimate Macintosh, we've some new links in our World Wide Web Road Map area. You can visit any of the following Web sites by typing its address (given below each title) into the Location line of your Web browser, or go to the Road Map section of MACFORMAT's pages on FutureNet. There you can find direct links to each of these sites and any addresses mentioned elsewhere in the magazine, as well as dozens of others. This issue's links will maintained until at least Friday 19 April.

Arts & Entertainment

Dave Coufal's Macintosh 3D First Person Games Home Page
http://www.mit.edu:8001/afs/athena.mit.edu/user/d/c/dcoufal/www/marathon.html
Marathon, Dark Forces, Doom 2... top games are using 3D to immerse you in their worlds. This site celebrates the best of them, with downloadable demos and links to other sites that give you the latest news on these titles.
3D game reviews start on page 120

Computing

QuickDraw 3D Home Page
http://www.info.apple.com/qd3d/QD3D.HTML
QuickDraw 3D is the future of 3D, making it faster and easier to create 3D masterpieces. At the official Apple site you can download the latest version, plus sample programs and files to try it with.
3D explosion! page 39

Ray Dream Designer User Forum
http://www.webcom.com/~dram/rdd/
If you use Ray Dream's popular 3D software, this site puts you in touch with other artists around the world. Discover designer tricks and tips, see the work of your peers, and play with the scenes and models you can download. An official Ray Dream site will also be opening soon.
3D explosion! page 39

Santa Fe Web Walk
http://www.3dartist.com/walk/santafe.htm
Canyon Road in Santa Fe on a Friday evening hosts the 'Art Walk', where about a dozen art galleries open late and hold special events you can tour round. This is the Web equivalent – open all day every day. The site introduces you to the work of several artists who produce superb 3D work on Macs and other computers.
3D explosion! page 39

Specular Online
http://www.specular.com/
The makers of *Infini-D* and 2D graphics software like *Collage* go on the Web with news and details of their products, plus some lovely images made by artists and designers who use Specular programs. You can also view the latest winners of the ongoing Specular Art Contest here.
3D explosion! page 39

Strata Inc.
http://www.strata3d.com/
The people behind *Studio Pro Blitz* give you the lowdown on what's new with their other programs like *MediaPaint* and *StrataVision 3D*. There's also another sumptuous gallery of images, and a link to an on-line forum for Strata users. 'Pinball', which Jon Watson created in *StrataVision 3D*, has been used behind the FutureNet logo at the top of this page.
3D explosion! page 39

Viewpoint DataLabs
http://www.viewpoint.com/
Just as you buy clip art (2D illustrations) or photos on CD-ROM, you can also get the 3D equivalent. Viewpoint have an entire catalogue of objects on-line, and you can also download some samples in the popular DXF format to have a look at. They even offer a service to build models to your specifications.
3D explosion! page 39

Yonowat
http://www.yonowat.com/
You know what? *Amapi* is a sophisticated 3D modelling program we've reviewed this issue. Take a look at the official company site for the latest information on the software.
3D explosion! page 39

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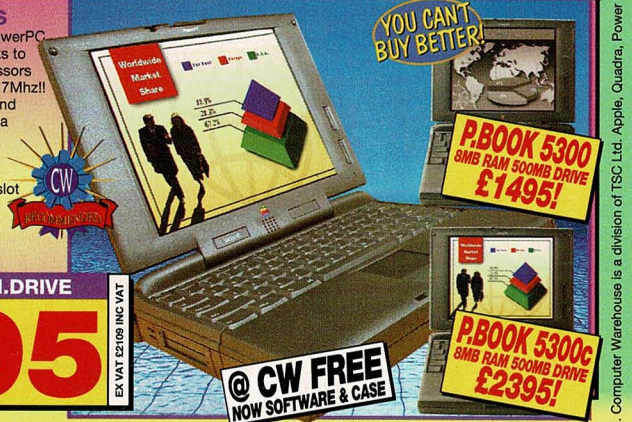

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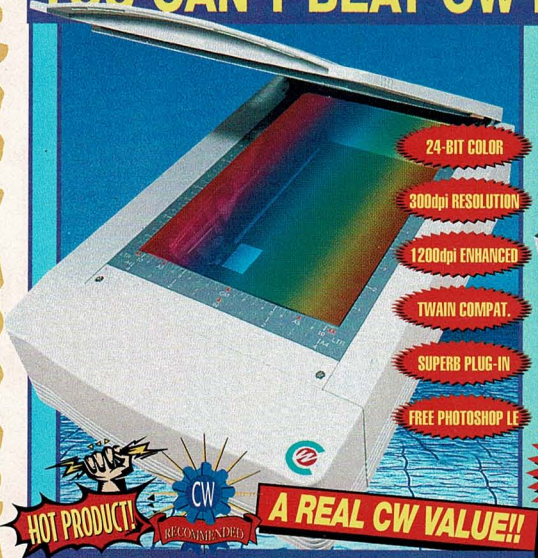

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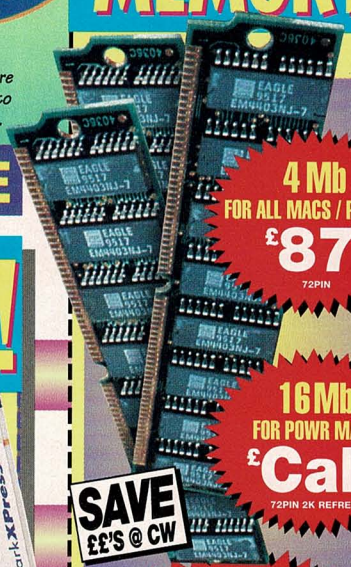

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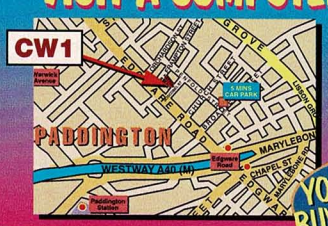

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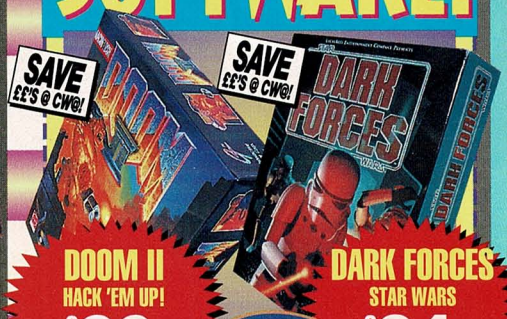

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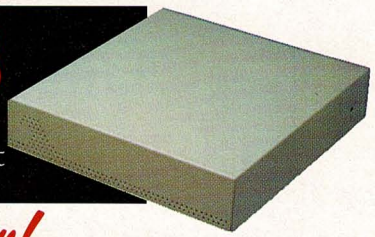

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MACFORMAT NEWS

PCI Performas to appear soon; Pippin gets closer; and multimedia spreads its wings. News Editor: Richard Hill.

Performas to get PCI this Spring

Look out for more Performas using the same design as the 5200 – but now they'll have the same PCI slot as the rest of the Mac range.

The next set of Performa home Macs from Apple will include PCI, the new standard for low-cost expansion cards. When they arrive in Britain, it should mean you'll be able to get a complete Mac system with PCI for under £1,500. According to the US industry paper *MacWeek*, they'll feature PowerPC 603e chips running at a minimum of 100MHz, compared to the 75MHz of the current 5200 and 6200 Performas.

PCI (Peripheral Component Interconnect) replaces NuBus as the standard way for Macs to accept cards like graphic accelerators. The new cards are cheaper and a wider range is available than with NuBus. One example is the QuickDraw 3D Accelerator Card, which boosts Apple's 3D graphics system. Games like *Havoc* (reviewed on page 122) will attain new heights on your Performa. Release dates and prices are yet to be announced.

You can use your PCI slot for cards like the QuickDraw 3D Accelerator, used by *Havoc* (above); or you can boost your video power with an MPEG card.

Pippin master plan unfolds

It's official: the Bandai Power Player is just the first of the new Pippin machines to appear.

The first models of Apple's new generation low-cost computer console, Pippin, are set to go on sale in Japan this March, and plans for European and American launches are going ahead.

Pippin is loosely based on the PowerMac, using the same Mac Operating System (OS) and PowerPC chip found in its big brother. But Pippin is aimed at people who don't need the full capability of a Macintosh or other computer, or simply can't afford one. By reaching out beyond the traditional computer audience, the release of Pippin echoes moves within the media industry to broaden the appeal of multimedia (see the story on the next page).

The device plugs into your television and is designed for simple computing, such as browsing the Internet and running multimedia and games titles. CD-ROMs designed to work on Pippin will also work on any PowerMac (although the reverse isn't true – a Pippin CD-ROM must actually include the Mac Operating System on the disc itself).

Bandai's launch of their Pippin machine, the Power Player, is scheduled for March, but Apple are now looking further ahead. Apple chief Michael Spindler told December's Personal Computer Outlook conference in San Francisco that three American firms have also signed up to produce Pippin machines. And Satjiv Chahil, who oversees the Pippin project for Apple, tells MACFORMAT that another 50 companies have approached him to join in. He expects to bring in a few of these by the end of the year, but is looking for partners in the larger field of electronics, like TV and hi-fi makers, rather than other computer firms.

Continued on next page

Puttnam urges UK media revolution

MONEY WELL SPENT

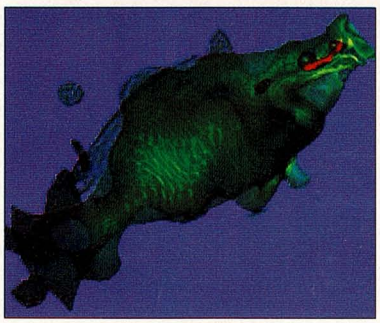
A nationwide survey of hundreds of people from American computer show organisers E3 has found that nine out of ten home computer and game console owners wanted a piece of software for Christmas. No, really.

Britain needs to play a bigger role in the rapidly growing multimedia industry, according to leading figures in the UK broadcasting industry. Apple played an important role in a recent event designed to get more professional film and television people involved in making British multimedia productions. If the initiative succeeds, it will mean you'll see more home-grown titles, as well as more companies with the confidence to release products for a worldwide audience.

More Middlesex designers: Inigo Orduna and Alex Mayhew (top), Mark Osborne and Steve Scott (above).

Sir David Puttnam, well known for his movie work and continuing support of the film industry in Britain, led a succession of speakers at a recent convention held by BAFTA (the British Academy of Film and Television Arts) in London.

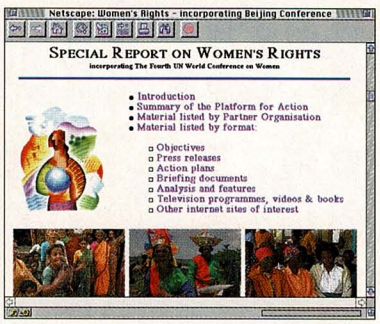
An invited audience of producers and other creative people were presented with examples of the current boom in publishing on CD-ROM and the Internet.



Middlesex University train designers like Tom Dussek, who created the artwork above.

Puttnam said that film, TV and multimedia companies should work more closely together to share skills and ideas, saying that they should be 'imaginative, ambitious and absolutely committed' to multimedia.

He added that education is a key theme underlying many CD-ROM multimedia titles, and that the UK would effectively have a trade deficit in educational materials in 1995, because of the huge quantity of overseas and especially American products being imported to Britain.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Introduction
Summary of the Platform for Action
Material listed by Partner Organisation
Material listed by format:
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Press releases
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Analysis and features
Television programmes, videos & books
Other internet sites of interest

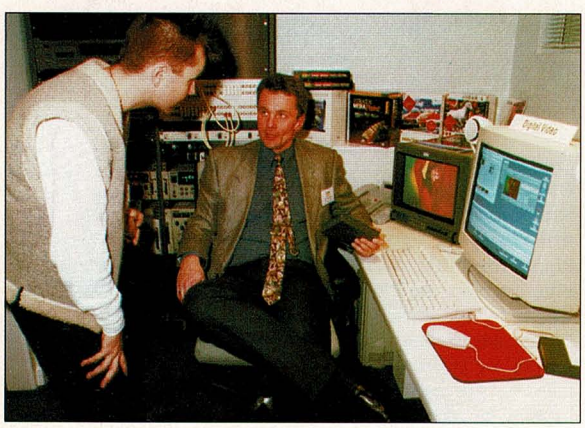
The One World site brings TV-style current affairs to the Web, reaching new worldwide audiences.

Peter Armstrong of the One World Broadcasting Trust, Stephen Boyd Davis and students of Middlesex University, and Max Whitby of the Multimedia Corporation all showed how CD-ROM and the Internet are tackling mainstream subjects covered by TV and publishers in dynamic ways.

Apple's David Roman presented the Mac as a computer with strong links in TV and publishing, and the first choice for most multimedia developers.

Music embraces multimedia

You can now look forward to more CD-ROMs from popular music artists and groups, following the opening of an innovative project at London's famous Abbey Road Studios. The complex, which has hosted the recording of all the Beatles' albums and many other hit records, now houses a multimedia studio. Musicians recording at Abbey Road will be able to work on interactive projects at the same time.



Ace violinist Nigel Kennedy (left) eyes up the Abbey Road multimedia studio, no doubt planning an interactive Aston Villa segment on his next Bach CD.

The studio is owned by giant record company EMI, who have collaborated with Apple to furnish the studio with PowerMacs and Mac software. It marks the first time a multimedia setup has been placed in the same building as a recording studio, and both EMI and Apple expect this physical proximity to make it easier for musicians to get involved with CD-ROM productions.

CD Plus, in particular, should receive a kick-start from this project. CD Plus is the combination of music and multimedia on a single CD, which you can use on your Mac and your hi-fi. It's part of a move to make multimedia more appealing to a wider audience. Currently, annual sales in the music industry are £22,900 million, against a comparatively small £900 million for CD-ROM. Companies like EMI believe they can play an important role in the growth of multimedia until it becomes a vital part of the entertainment industry. Apple's Satjiv Chahil says he believes multimedia has the potential to enjoy 'a much larger social context in the world'.

EMI have confirmed that artists signed to their labels, which include Virgin Records and Parlophone, are working on interactive projects, but Abbey Road is open to other musicians as well. EMI artists include the Pet Shop Boys, the Rolling Stones, Eternal and Radiohead.

The US record company Reprise have also linked up with Apple to explore the possibilities of multimedia and music. Reprise will use Macs at all levels of their work, from recording albums to promotion using the Internet and Mac technologies like QuickTime video. Reprise artists in the States include Neil Young, Frank Sinatra, Randy Newman and Chris Isaak.

Continued on next page

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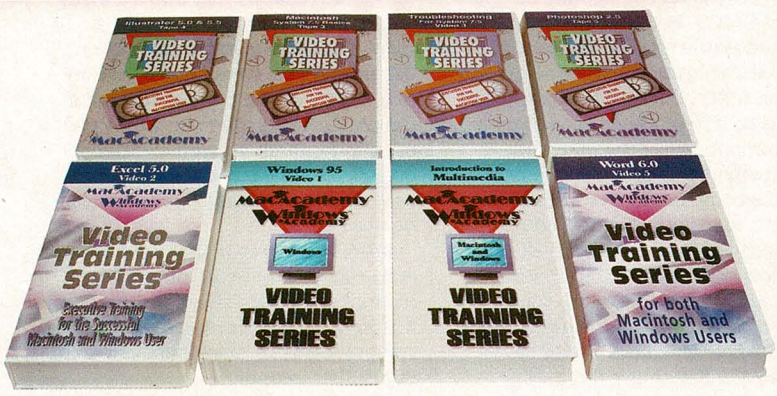
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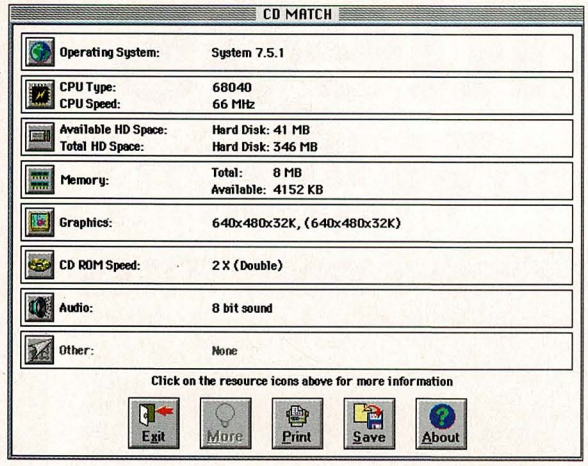

Free *CD Match* software tells you exactly what sort of setup you've got: all you have to do is compare the results with what's written on the box.

Look out later this year for software package labels that will make it much easier to tell if the program you want to buy will work on your Mac. CD Match is a concept that's been launched by the Interactive Multimedia Association, and has the support of Apple, among many other companies. It's an American initiative, but you can expect to see the labels appearing over here too, because we usually have exactly the same product boxes.

The concept behind CD Match is essentially to tell you what type of computer you need to run the program you're hoping to buy. Currently, software publishers can describe the system requirements in any way they like, which leads to an inconsistency across different brands that can be confusing for customers. Anyone using the CD Match system will be presented with the essential facts in the same way.

You'll also get help with a free program, called *CD Match*, which you can use to get a list of your Mac's processor chip, memory and so on. The list is in the same format as the labels on the software packs.

The IMA are spreading the word on CD Match ready for it to appear on hundreds of titles in a few months' time. Other firms supporting the idea include Macromedia, whose *Director* software is used to create multimedia programs, and Electronic Arts.

System Requirements

Operating System	Mac OS System 7.0	Windows®3.1 - 3.11
CPU Type & Speed	68040, 40MHz	486 DX, 33 MHz
Hard Drive Space	9MB	12 MB
Memory	2048K	8 MB
Graphics	640 x 480 x 16M	640 x 480 x 256
CD-ROM Speed	2X	2X
Audio	8 BIT	16 BIT
Other Needs	QuickTime®2.0 - 1.1	VFW®2.1

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Look out for labels like this one on the back of American software boxes later on this year.

Super-fast chip in the works

The PowerPC chip that fuels the PowerMac is set to undergo another leap, if a Californian firm's work pays off, giving you the chance to buy the fastest personal computers built so far. Exponential believe that their PowerPC chip could be twice as fast as any version on the market or in development.

Exponential are being backed with money from Apple and other investors while they continue their development. Current versions of the PowerPC chip from IBM and Motorola use an engineering design called CMOS, but another design, Bipolar, is much faster. Unfortunately, a Bipolar chip consumes more power than a CMOS one and is expensive to make, so it hasn't been used in desktop computers like the Mac.

Exponential reckon they've managed to combine the best of both designs to make a BiCMOS chip, with the speed of Bipolar and the efficiency and low cost of CMOS. Tests are continuing that should lead to chips appearing in computers early in 1997 – and Apple machines would be among the first to use them.

New use for old Macs

Old computers and parts that are usually just thrown away can now be used again, thanks to a new system that's been developed by a company in California. MBA Polymers are able to take the plastic cases of Macintoshes and other computers, as well as smaller objects like printer cartridges, and turn them into plastic flakes that can be used again.

MBA Polymers say that other systems can take up to 30 minutes to separate the plastic they want from the metal and other materials in the computer – MBA machinery can do it in just five seconds.

Apple blues continue

After suffering months of extremely tough competition from other computer makers, Apple are now saying they may have made a financial loss during the last three months of 1995.

The announcement comes despite a fantastic surge in Mac sales over the past year, as Apple have worked hard to cut prices and shouted from the rooftops about how good the Mac is. But the company has been feeling the pinch, and is now looking at ways to save money. Options include laying off some employees and making changes in the way the firm operates. **MF**

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Tools

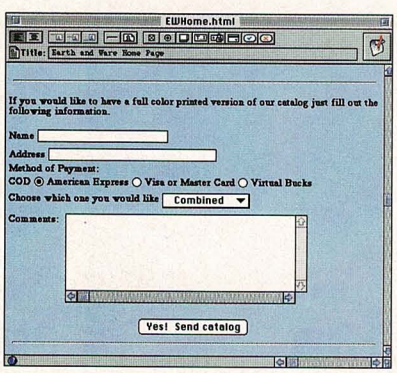
HTML made easy. *PageMill* brings the chore of creating Web pages kicking and screaming into the 1990s with a selection of tools much like those you'd find in a desktop publishing program.

Adobe's newest release seems to have benefited from the booming interest in the Internet and its World Wide Web area. *PageMill* helps you write Web pages – which are made with a basic form of programming code called HTML – more easily than any program to date. Adobe say they've sold 30,000 copies in the program's first month of release.

Leading mail order dealer The Mac Zone confirm the demand for easy Web creation in Britain. 'The anticipation for *PageMill* was phenomenal,' says the firm's Max Wright. 'It's the most desired software product we have seen in a long time.'

Writing HTML usually involves learning a procession of codes – to change text styles and sizes, or insert pictures, for example. In a return to the old days of computing, you often have to type these codes in yourself – something like laying out a page in *QuarkXPress* by typing in commands to position boxes, rather than just dragging the box to the place you want. *PageMill*, however, brings Mac features that you take for granted in other software, like using icons and different tools to perform functions, to the act of writing HTML code. For the first time, you can work with the code without seeing it – you just bring in the text and graphic content of your pages, and arrange it by setting styles as you would in a word processor and moving images to where you want them. *PageMill* does the hard work of interpreting your design as HTML code, so that Web browsing programs like *Netscape Navigator* and *Mosaic* can display them.

The program looks after the difficult parts of making pages for the World Wide Web, like designing forms.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Comments:
Yes! Send catalog

As well as taking care of the basic style and heading commands, *PageMill* also provides help with creating links – the pieces of coloured text you click on to jump from one page to another. It's designed to enable you to set up an entire site (a collection of pages) quickly. Each page has an icon that represents its name and location. You simply drag the icon for any page onto the piece of text you want to make into a link, and the connection is made automatically.

Elements like name and address forms you can fill in take a lot of setting up with HTML, but with *PageMill* you can design a form in a few seconds by clicking on a couple of buttons. The program even converts your images automatically into a format that can be displayed on the Web.

So is *PageMill* the answer to your Web page prayers? Look out for the MACFORMAT review soon.

- **Price: around £100. Out: now.**
- **Requires: any colour Mac with 3Mb of free RAM and System 7.1.**
- **For more details contact Adobe on 0181 606 4000.**

NEW FOR THE MAC

Z-Art

A new collection of disks from Viewpoint Datalabs brings the 2D concept of clip art into the 3D world. *Z-Art* is a library of objects you can buy and use in your 3D, rather than creating your own models from scratch. 3D clip objects offer more possibilities than 2D art because you can change an object's positioning or adjust the lighting to create a completely different feel.

Thousands of *Z-Art* models are already available, in popular formats including DXF, *Infini-D*, *Dimensions*, *Ray Dream Designer* and the new 3DMF format for QuickDraw 3D, which you'll be able to use in virtually every major 3D program in future. For more details speak nicely to Viewpoint Datalabs on 01784 451815.

■ Try out Viewpoint's model clip art with our sample of five DXF files on the Cover CD.

Use the IRISPen to scan text into your Mac at up to 100 characters second.

IRISPen

The IRISPen, a pen-shaped scanning device MACFORMAT first reported on in issue 29's What's New, is now available for a wider range of Macs. You can use the IRISPen to read in text from a page, sweeping across it at up to 100 characters a second – much like reading a barcode in a supermarket. It's also able to understand tables and convert them automatically, keeping the format of columns. You can use this feature to enter rows and rows of figures into your spreadsheet or accounting program, for example.

You now have a choice of connections for the IRISPen – a NuBus slot (the type you find in Quadras, for example) or, from now on, the standard ADB port you use to plug in your mouse. You'll need a minimum of a Mac LC with 8Mb of RAM and System 7. Each version costs £293 – for more details contact distributors IDS on 0171 336 7942.

Drawing Slate II gets smaller

The smallest version yet of CalComp's Drawing Slate II graphics tablet is now available. It's A6 size – a quarter of the size of this magazine page – and enables you to draw with a special pen straight into your favourite graphics program.

The pen that comes with the £147 tablet is pressure-sensitive, so you have good control over line width and shading as you draw. If you use *Painter 3.1* or *Photoshop 3.04* software, you can also use the pen to erase parts of your drawing. For more details contact CalComp on 01734 320032.

3 Prong Plug

Grolier are best known for their strong range of CD-ROM reference titles, including the *Grolier Multimedia Encyclopedia* (reviewed on page 94) and *How Would You Survive?* Now they're branching out into the games field with a new division called 3 Prong Plug.

You play a tough medallion-bearing vampire hunter in *Terror TRAX*, aided by your computer, Ether. You're *that* hard.

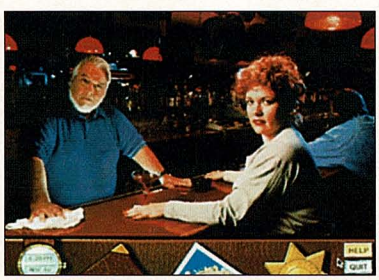
Their first set of releases will come out during 1996 and early next year. First out of the starting blocks in February is *SFPD Homicide Case File: The Body in the Bay.* It's a video-based adventure that tells the tale of an actual crime, and Frank Falzon, the investigator who solved the case, is on hand to give you advice. Playing a wet-behind-the-ears detective, you have to identify the murder victim, then collect evidence strong enough for the District Attorney to bring a prosecution against your suspect. The trouble is, the clock never stops ticking: you have just two weeks to complete your tasks. *SFPD Homicide* will cost £44.99.

Following soon afterwards is *Terror TRAX*, a horror adventure drenched with vampires and zombies. Grolier describe it as a 'Saturday night' disc, so grab yourself some popcorn. You're an undercover agent tracking down paranormals, aided only by your guile and Ether, a ghostly computerised assistant. Also due in February, *Terror TRAX* will cost just £21.99.

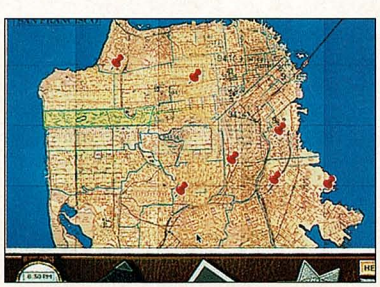
Spring brings *Battle of the Ironclads*, a tactical battle based on one of the skirmishes in the American Civil War. It's your chance to side with either the Confederates or the Union, as the fight unfolds with video sequences and accurate historical details. You can compare your decisions with those taken by the commanders at the time.

Then it's into Autumn with *Banzai Bugs!* and *Battleships of Stone*. In *Banzai Bugs!* you're a fly trying to land on food and dodge the swatter. If the originality of the idea is backed by delivery of the promised 360-degree 3D action, this could be a cracker. *Battleships of Stone* takes you to medieval Europe – you are lord of a castle. You supervise its construction, making life-or-death decisions about siege equipment and food rationing. Once it's built, you can explore your fortress in 3D in a first-hand re-creation of life in the Middle Ages.

Next Christmas should welcome *Toobers: Surf and Destroy*, described as a cross between *Ghostbusters* and the Channel Four comedy *Home Improvement* – perhaps not the first combination that leaps to mind when designing a game. Your challenge is to stop a computer virus that's destroying the Internet from within. All you have are home-made devices from the back of a DIY shop. It's a cartoon fantasy that takes you into the Net itself.



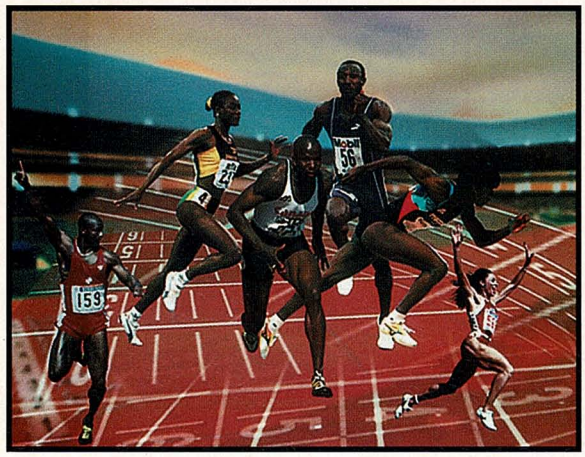
SFPD Homicide challenges you to piece together a murder case by interviewing suspects in the city.



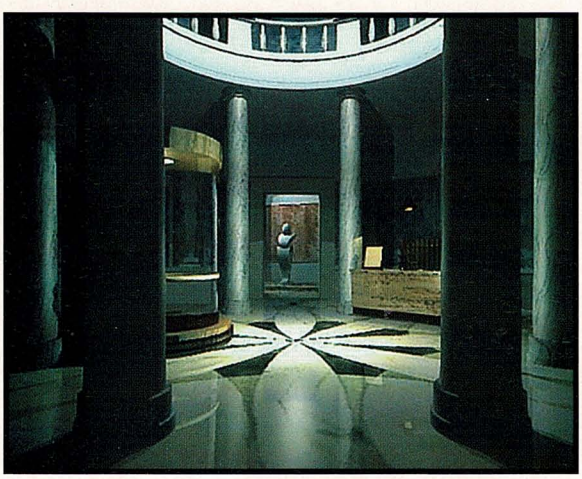
The story is based on a case that actually happened – you have to cross SF to crack it.

The first *SFPD Homicide* CD-ROM recruits you to avenge *The Body in the Bay.*

Notting Hill



International Athletics takes you behind the scenes and shows you how to get fit, employing the help of some of today's track and field superstars.



Enter the Academy of Song to discover *The Art of Singing*. Notting Hill's CD-ROMs use fresh ideas and household names to get you involved.

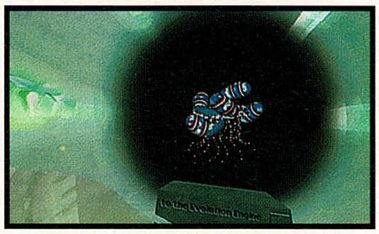
Notting Hill are a new firm aiming to bring a touch of class to multimedia with a range of lifestyle titles. The company was established by Andreas Whittam Smith, the first editor of *The Independent* newspaper, and his son. Look out for their first four titles this March, priced at £39.95 each.

Let's start, appropriately enough, with *The Evolution of Life*. Richard Dawkins, scientist and author of books like *The Selfish Gene*, uses multimedia to describe the development of life on earth, showing how DNA has been the catalyst for the variety of flora and fauna on the planet today. You use what you learn to make your own simulated lifeforms with your Mac, growing and merging 3D models to see evolution before your eyes.

After creating 20 new forms of life, you'll probably need a drink. *Wines, Spirits and Beers* takes you on a world tour of booze, from fine wine in the South of France to cocktails in the bars of America. Head into the cellar and you'll discover a full wine guide with prices and recommended years and vineyards. Beer hunters get an A to Z of beer, and there's plenty of alcohol trivia and an analysis of the importance of drink in our culture.

Once you've selected your drink, relax with *The Art of Singing*, a CD-ROM produced with the help of the Royal Opera House. It's all about great classical singers, looking at how they are trained and how the voice works. Stars like Dame Joan Sutherland talk about their work, and you can try interactive exercises to train your own voice. There's also a reference library that explains technical terms. It also features 40 minutes of recordings from Pavarotti, Carreras and Te Kanawa, which all takes place within a 3D environment called the Academy of Song.

Get down the pub to find out about *Wines, Spirits and Beers*, including a guide to booze culture.

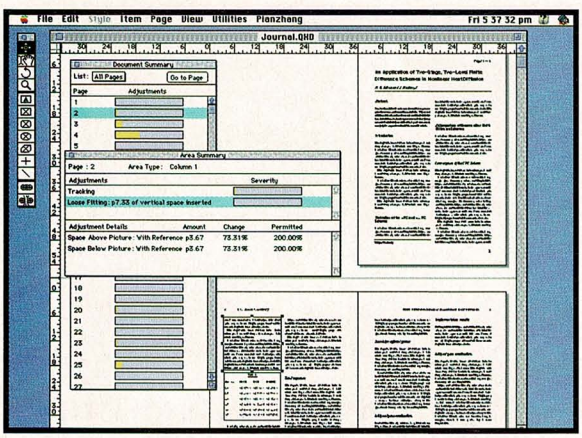


Grow your own: *The Evolution of Life* invites you to learn about lifeforms by evolving your own.

Then get yourself back into shape with *International Athletics*. Enter the high pressure arena of a giant stadium, where athletes like Linford Christie and Sally Gunnell talk about their training techniques and offer advice. A doctor explains how to protect yourself from common injuries and suggests a proper diet. You can put your knowledge into action by competing in virtual athletics events, where you succeed or fail based on well you complete your training and follow the diet. There's also a history of the Olympic Games and a database of athletic achievements through history.

Pianzhang 2

Pianzhang 2 works with your copy of *QuarkXPress* to help automate the production of long documents like books and manuals.



If you regularly lay out large documents like books in *QuarkXPress*, the latest version of *Pianzhang* can help your Mac take the strain. It enables you to automate the laying out of hundreds of pages, which makes it useful for companies like book publishers.

Version 2.0 offers new features and is faster than its predecessor, while retaining its £1,050 price. You can set it to adjust text tracking in a paragraph so that it fits the text on the page more easily, and you can also change the number of columns mid-page, switching from a three-column layout for article text to one column for a large headline, and then back again. It also offers improved placement of images on pages. You can adjust settings on any image so its position on the page and the way text flows round it are decided automatically.

Pianzhang also improves on areas *XPress* is weak in, like placing footnotes and creating contents tables.

- **Price: £1,050. Out: now.**
- **Requires: LC or better with 12Mb of RAM, System 7, a 13-inch monitor and a copy of *QuarkXPress 3.31*.**
- **For more details contact Miles Ahead on 01344 861133.**

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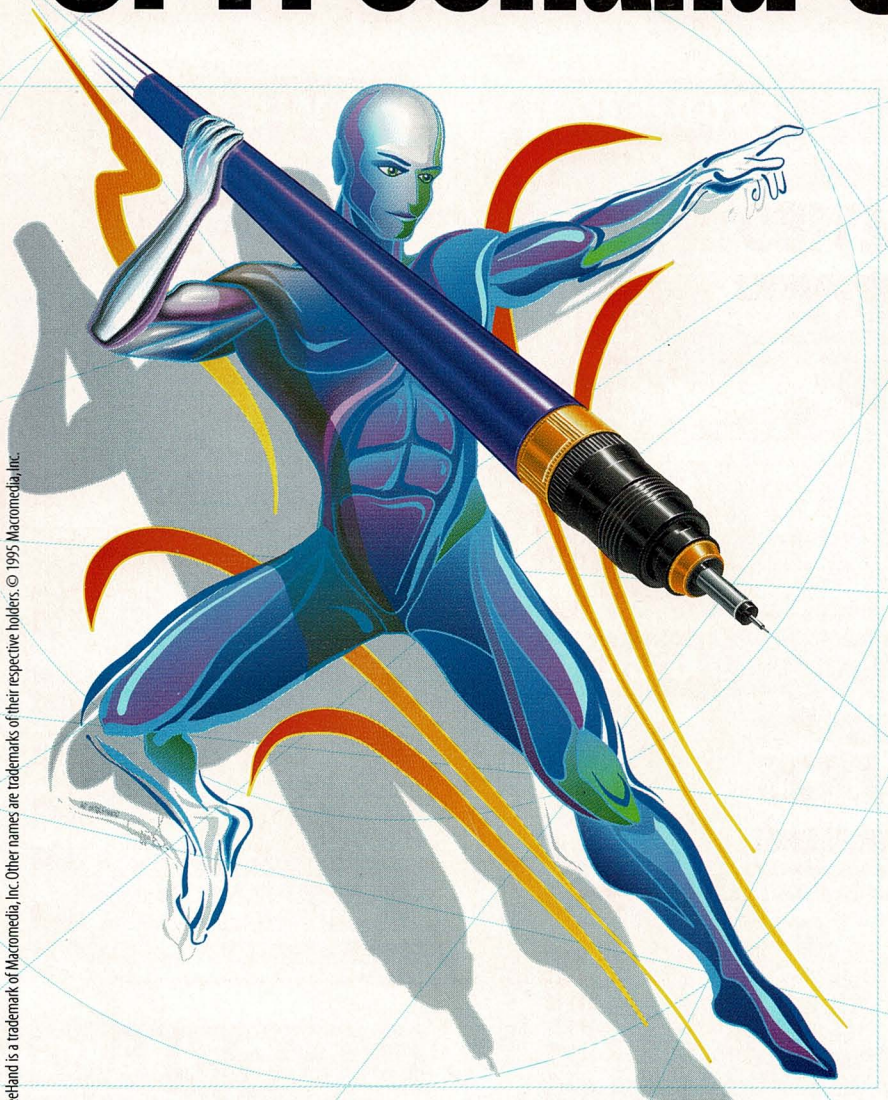

Can you feel it? Ultimate power and unlimited freedom in design and illustration. It's all there in FreeHand™ and there's even more in FreeHand 5.5 which comes with 10,000 pieces of clip art and over 500 fonts completely free. So go ahead, take a leap into the future and feel the power of FreeHand for yourself.

Key New Features in FreeHand 5.5

Photoshop plug-in support

Use your favourite Photoshop plug-ins directly within FreeHand 5.5, there's no need to launch Photoshop! Simply select a placed TIFF image on your FreeHand page and apply the filter. As well as supporting plug-ins like KPT Vector Effects, FreeHand 5.5 supports a whole range of Acquisition plug-ins, so you can scan directly into FreeHand too.

Create PICT images from any FreeHand graphic

FreeHand 5.5 now allows you to create PICT (bitmapped) images from anything created in FreeHand. The PICT can then be saved or copied into the clipboard. Creating anti-aliased text or pictures, for use in Macromedia Director, has never been easier.

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FreeHand is the only application able to import multi-page Adobe Acrobat files directly and then edit them.

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8Mb	500Mb	✘ 15" MultiScan	✔	✘	✔	£1179
8Mb	500Mb	✘ 14" MultiScan	✔	✔	✔	£1229
8Mb	800Mb	✔ 14" MultiScan	✔	✘	✔	£1279
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UMAX

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VISTA T630	LE	✘	£299
VISTA T630	FULL	✔	£799
VISTA S8	LE	✘	£499
VISTA S8	FULL	✘	£599
VISTA S8	FULL	✔	£899
VISTA S12	LE	✘	£575
VISTA S12	FULL	✘	£689
VISTA S12	FULL	✔	£975
GEMINI	LE	✘	£779
GEMINI	FULL	✘	£899
GEMINI	FULL	✔	£1199
POWERLOOK II	FULL	✘	£1999
POWERLOOK II	FULL	✔	£2299
MIRAGE A3	FULL	✔	£5595

Transparency Adaptors *(Quote model on order)* £422
OmniPage bought with any Umax scanner £45

EPSON

Model	Photoshop	Textbridge OCR	Price
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GT 8500	LE	✔	£499
GT 8500	FULL	✘	£679
GT 9000	LE	✔	£599
GT 9000	FULL	✘	£799

Transparency Adaptor for 6000, 6500, 8000, 8500 and 9000 models £418
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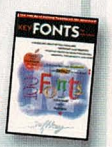

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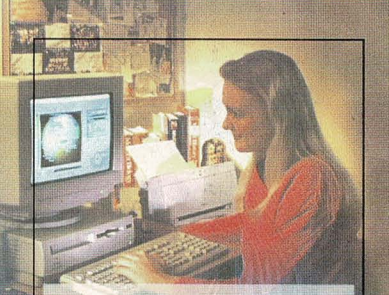

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That's the question we asked in a recent survey. When given a choice of ten categories, customer 'TOP THREE' priorities were...

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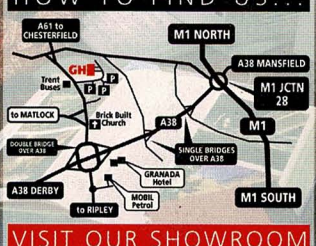

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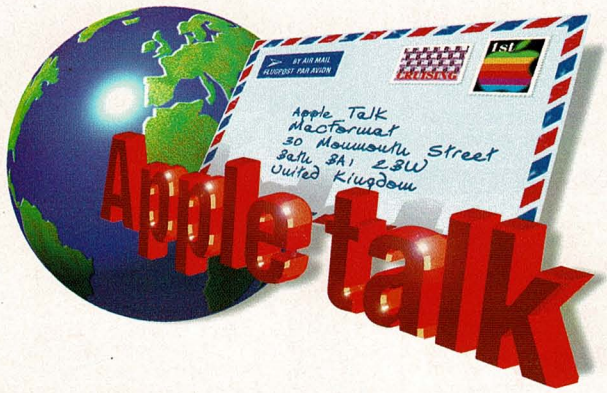


Try something new! Turn over a new leaf – and write to us on it. The address: Alex Summersby, AppleTalk, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.

A FRESH START

Every letter and postcard published on these pages wins a MACFORMAT binder. If you can't wait, if your life needs that touch of style *now*, you can turn to page 115 and order your own. Yes, it's in your power to transform your life... or at least get the last year's worth of MACFORMATS off your floor and up on the shelf.

New year, new opportunities... for you to have your say, *and* get a MACFORMAT binder in return if your letter is published.

Sick of the Internet

VIRTUALLY BORED?

Internet, the Net, cyberspace, World Wide Web – AAAAGGGH!

Boy, am I sick of the Internet! Surely it's been the most overused, hyped word of 1995. I'm sorry, but your feature on digital publishing in MACFORMAT 30 was the last straw. That was one of the most boring issues of MACFORMAT I have ever read. In the same month as other magazines reviewed *FA-18 Hornet 2.0* and a bunch of other cool stuff, you were prattling on about how really wonderful it is to construct on-line home pages!

Almost daily I find out something new I can do on the Internet, and according to the press there are not many things you *can't* do on the Internet, so why the hell do I want to read about something else I can do virtually instead of properly?

The Net is a classic example of computers for their own sake. I'm no technophobe, but I'm of the opinion that something should be useful before you rant on and on about it. The only real use of the Internet seems to be the ability to chat about *Star Trek* to some anorak in Seattle – that and to fill countless pages in supplements and magazines, and to make British Telecom ever richer.

Let's all get real here. The Internet is just a large network of computers and that's *all* it is. It isn't a gateway to another world or a cure for cancer. Perhaps someday the Internet will be fully developed and we'll be able to freely communicate via screens with anyone else in the world. But then again, perhaps someday BT will stop robbing us blind and we'll actually be able to talk to somebody as cheaply as e-mailing them. Enough said?

Michael Veal
Fyfield, Essex

I doubt it. Fundamentally, the Internet is all about communication – sharing your views and interests with others. Why not *chat with someone in Seattle about* Star Trek, *or someone in Surbiton about BT if you like? Creating a home page is like writing a letter to us, except that it's there for anyone with access to the Internet to read – it doesn't depend on an editor deciding to publish it, or a publishing company being able to afford the ever-rising cost of paper, and so on. That seems pretty useful, even* valuable, *to me. Any other views?*

As for the game reviews: we do in fact review every new Mac game, but only when a finished *version is released. We* never *'review' demos or beta test versions, only the finished products you could buy yourself. We're not here to hype the 'cool' stuff, we're here to help you make an informed buying decision. Simple as that.*

Proof that programmers do have a sense of humour, from Martin Deutsch (who lists no less than *four* e-mail addresses, *plus* a Web home page, so he obviously knows his comms...). Has your Mac given you a silly message? Grab it by hitting **[command] [shift] 3** and send it in to us!

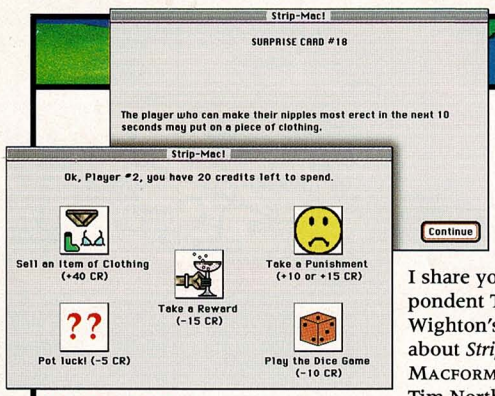
Another view of Windows?

WHAT'S ALL THE FUSS ABOUT?

All of the fuss over the launch of Windows 95 is driving me nuts. Not the ludicrous media coverage at the launch, or even the claim by a certain newspaper that it is one of the most important inventions since the biro. No, what really irritates me is the space in MACFORMAT that is dedicated to the type of Mac users who could be best described as rabid fanatics, who seem to be determined to smite the evil infidel 'windoze' users and their maniacal megalomaniac leader, Bill Gates. They denounce Windows 95 as rubbish and slam it for not being user friendly enough, etc, etc, etc. What these people have to say is boringly predictable and I am tired of reading it in every Mac magazine that I lay my hands on.

Perhaps these readers take their computers too seriously. When it comes down to it, who cares what operating system you use? Is it really that important? If you are happy with what your OS does for you, whether it

THE GREAT 'PORN' DEBATE, PART 2


Strip-Mac!
SURPRISE CARD #18
The player who can make their nipples most erect in the next 10 seconds may put on a piece of clothing.
Strip-Mac!
Ok, Player #2, you have 20 credits left to spend.
Continue
Sell an Item of Clothing (+40 CR)
Take a Punishment (+10 or +15 CR)
Take a Reward (-15 CR)
Pot luck! (-5 CR)
Play the Dice Game (-10 CR)

Strip-Mac! 3.0.3 – harmless fun or schoolboy smut? And should it be on the Cover CD? Your views are welcome! Write to 'The Great Porn Debate' at the address at the top of this page.

I share your correspondent Tony Wighton's views about *Strip-Mac* in MACFORMAT 32. If Tim North *[its author]* wants to titillate himself and others, we can only feel sorry for him. I would, however, expect whoever compiles these discs to have sufficient sense to realise that the indiscriminate distribution of this type of school-boy smut will cause offence in some quarters and inevitably detract from any standing you may have. It certainly will not increase your circulation!

While I (age 80) am unaffected by this, I shall as a matter of principle cease to be a subscriber if this sort of material becomes the norm.

Cyril Elliman
Southampton

And for the defence...

Dear MACFORMAT,
Or should I say, Mac-'Why do you publish letters from these "I'm a Christian" type fools?'-mat!

Each time a game or something that is a bit suggestive or includes scantily clad females is put in the magazine or on the CD, a letter appears stating 'I'm a Christian, I don't like it, so the rest of you shouldn't have access to it either'.

Strip-Mac is a perfectly harmless bit of fun. If a group of like-minded people (married or not) want to get together and play it, why not? It's none of your business or mine. It doesn't 'advocate promiscuity' – people are either promiscuous or not.

As for Tony Wighton's concerns about children, I don't see any complaints about the games *Doom, Marathon, Bloodbath* and so on, all of which have the sole aim of trying to kill as many things or people as possible, with blood and guts all over the place. But maybe that's not so surprising when you consider the millions of people killed over the years in the name of religion.

Tony's Page 3 Web girl is a great idea though. Why not also have a readers' wives section on the CD-ROM? That will really upset him!

Rob Bailey
Petersfield, Hants

be Linux, Workbench, Windows, DOS or Mac OS, does it really matter what another OS does? I am perfectly happy with my Mac and I don't care about Windows 95. As long as I can word process, send out my e-mail, surf the Net and play *Marathon 2*, there is no problem. If more people took this point of view, maybe the launch of Windows 95 wouldn't have been such a media circus, and then ordinary people wouldn't have to put up with having letters pages filled with 'my computer is better than yours' letters, and I wouldn't have to waste my time composing this e-mail.

Neil A Simpson
via CIX

I suppose it may get a bit boring if everybody *keeps pointing out that the Emperor has no clothes on. Should we stop now?*

Apple Expo exposed?

NOT A PARTY ANIMAL

Yes, I too couldn't resist the attraction of yet another Apple Expo. What did I think of it? Not a lot! The catering facilities were again diabolical – as were the food prices. £2.75 for a cheese and tomato sandwich and £1.15 for a jam doughnut! Plus, you had to eat the above exorbitantly expensive 'delicacies' on the hoof! Next year, I'll bring a packed lunch and a Thermos flask.

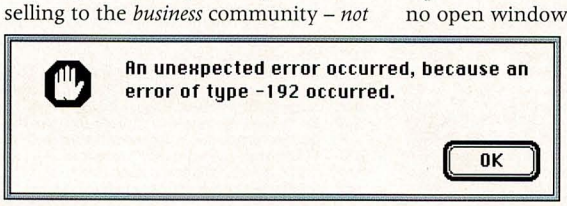
Bargains? Well, other than cut-price magazines, they were few and far between. Unless you felt compelled to enter one of the many manic scrums or queue up for what seemed to be an eternity, that is. And no, I didn't get to 'surf' at the Internet Surfing Centre, either – there were just too many sharks in the water.

Let's be honest. At the end of the day, Apple Expo is primarily about selling to the *business* community – *not* the home user. The home user is just icing on the cake – or put another way, a nuisance. And I overheard three exhibitors say exactly that. I won't repeat what I told *them*.

No, it's about time home users were afforded the respect they deserve – and more importantly, a Mac Expo that wholly reflected the needs and aspirations of home users only. The business suit types (those who don't buy their Macs, and consequently use them for free) and their mobile talk-boxes can go elsewhere!

Ray J Howes
Weymouth, Dorset

In the UK, the Mac is certainly still largely a business machine – and Apple Expo has been going for many years as a trade show. Any other views on Mac shows?



Silly Things Your Mac Says, number 424, by e-mail from Koryn Grant, who signs herself 'a Kiwi in the UK' and says this is her 'favourite (extremely informative) error message'...

How to sell more Macs

MORE HYPE NEEDED?

On visiting PC World in Edinburgh recently, I was annoyed to find a Performa 630 sitting with a blank Desktop. *ClarisWorks* was running but had no open windows, and there was no security software installed whatsoever. I was near to copying the *A-10 Attack* demo from the MACFORMAT 28 CD-ROM, which I happened to have with me, onto the machine. A simple copy of *Maelstrom* would have shown what the Mac can do – I noticed a PC running a ZX-Spectrum-class game resembling *Horace Goes Skiing*.

Also, after playing the brilliant *A-10 Attack* demo, I wondered how anyone expects to sell the game by showing a screenshot of the plane exploding on takeoff. Why not a shot of the A-10 flying through the dramatic canyon in Demo Island, or even past the Hercules transport sitting beside the runway? Many more Macs, and software for them, would be sold if retailers made any effort to do so.

David Aitken
Linlithgow, West Lothian

Apple are now actively training dealers to do just that. Let's see what happens.

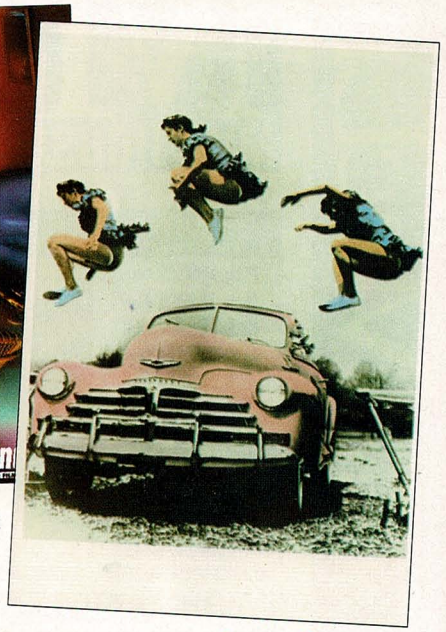
System 8 wish-list

A BETTER (TIME-) MANAGER?

Just a quick e-mail (I have to go out in ten minutes) to say that I think the new System 8 needs to make it easier to turn Extensions on or off. For example: say I turn all my Extensions off to save memory (I only have a measly 4Mb) but then find I need one. I should be able to just turn it on without having to restart and all that.

Robert Sang
via FutureNet

Lindsay has just explained to us at great length why this is impossible. Is it? ***MF***



Two more MACFORMAT binder winners: left, the ultimate fashion accessory to go with your lava lamp and beanbags (and Mac Classic?): a Trabant! Could revive the whole Eastern European car industry, we reckon... The card is from Charlie Parkin of Cheltenham, Glos. Right, an even more surreal use for a '50s Yank Tank, from Geoff Pike of Teddington, Middlesex. Remember, whenever you write to MACFORMAT or enter a competition, an eye-catching postcard could win *you* a binder too!

HOW TO GET IN TOUCH WITH MACFORMAT

■ Our address for letters is on the previous page – the shorter your letter, the better its chances of being printed. Longer letters may be published in our regular 'Talking Point' section (on page 131 this issue). If you'd like a letter included in 'Readers' Corner' on our CD-ROM, make sure it contains no defamation or obscenity, then send it in as a *TeachText* document on a disk marked 'MACFORMAT Readers' Corner'. Include your name and address, and note that we can't return your disk.

■ Our fax number is 01225 446019. Please write 'MACFORMAT' prominently at the top so our receptionists can tell which of Future Publishing's 40 magazines to forward it to.

■ E-mails are welcome at:
macformat@futurenet.co.uk
or **macformat@cix.compulink.co.uk**
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■ Sorry, but personal replies to letters, faxes or e-mails are impossible – we're flat out trying to get the magazine out every four weeks!

■ If you have a defective Cover Disk or CD-ROM, please return it to the appropriate address given on page 13 this issue, *not* to the editorial address. We do not have any stocks of Disks or CDs here.

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■ The legal bit, because no, we're *not* looking for trouble: all correspondence sent to our editorial address (by mail or any electronic means) will be considered for publication unless you specifically state otherwise, and we reserve the right to edit published letters for reasons of space, clarity or legality.

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CKBD	Three by Five (5 mouse rated computer "corkboard")	£65.00
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BUSINESS

GENERAL

CLWR	ClarisWorks 4.0 (market leader of the integrated world)	£95.00
DLTG	DeltaGraph 3.5 (popular, varied 2D & 3D graphing tool)	£115.00
INCL	In Control (to-do list manager, outliner, columns)	£65.00
EXCL	Microsoft Excel 5.0 (market leader, great features)	£265.00
MSOF	Microsoft Office 4.2 (Word, Excel, PowerPoint)	£375.00
WRKS	Microsoft Works 4.0 (WP, DB, Comms, Draw, SSheet)	£59.00
MSPJ	Microsoft Project 4.0 (full featured project mngmnt)	£345.00
SINP	Route 66 (UK, Europe, USA route planner)	from £89.00
STKW	StockWatcher (analyze stocks, commodities etc.)	£145.00

ACCOUNTING

ACCx	Access 3.0 (modular multi-user office accounting)	from £395.00
MCMY	MacMoney 4 UK (home accounts/budgeting package)	£65.00
MYOB	MYOB 5.0 (fully integrated single user business accounts)	£145.00
RITZ	Ritz (powerful and comprehensive for smaller business)	£319.00

PRESENTATION

ASTD	Astound 2.0 (fabulous new version)	£185.00
CLIM	Claris Impact 2.0 (multi functional presentation tool)	£95.00
PERS	Persuasion 3.0 (high end presentations with outliner)	£255.00
PWPT	PowerPoint 4.0 (powerful, intuitive, easy inteface)	£265.00

GRAPHICS

PHSPB	Adobe Collection (Photoshop,Illustrator, Dimensions)	£499.00

DARKROOM & RETOUCHING

DBLL	Debabelizer Lite (converts graphic file types)	£89.00
KPTK	Kai's Power Tools 3.0 (amazing filters for Photoshop)	£109.00
KPTC	KPT Convolver (adds power and ease to Photoshop)	£95.00
LIVP	Live Picture (real-time photographic retouching)	£645.00
PHSP	PhotoShop 3.0 (special offer price - while stocks last!)	£435.00

PAINT & DRAW

DBLR	Dabbler ("low end" Painter)	£60.00
FRND	Freehand 5.0 (professional PostScript drawing & text)	£315.00
CLDW	ClarisDraw (powerful, easy to use draw package)	£89.00
ILST	Illustrator 5.5 (pro PostScript drawing, text & layout)	£299.00
KPTV	KPT Vector Effects (Illustrator/FreeHand FX Plug-Ins)	£95.00
PNTR	Painter 4.0 (the premiere painting program)	£299.00
SMSK	SmartSketch (unique vector/bitmap draw program)	£45.00
STRM	Streamline 3.0 (superb PostScript auto-tracing tool)	£110.00

CAD & MODELLING

ADIM	Dimensions (Adobe's 3D extension for Illustrator)	£110.00
PSER	Fractal Design Poser (create human figures)	£119.00
INFD	Infini-D 3.0 (leading 3D modelling & rendering tool)	£525.00
KPTB	KPT Bryce (3D Skies and landscapes)	£95.00
MCAD	MiniCad 6.0 (native professional 3D design & analysis)	£495.00
RYDS	Ray Dream Studio (3D design, modelling, animation)	£279.00
STRVP	StrataStudio Pro (fast, native 3D modeller)	£875.00

DESKTOP PUBLISHING

ACRA	Adobe Acrobat 2.0 (paperless publishing revolution)	from £110.00
CAIP	Click Art (2000 clip art images)	£39.00
CBxx	Corel Images (25 CDs of clip art quality photographs)	£110.00
CBGB	Corel Gallery II (15000 clip art images)	£49.00
FTCH	Fetch (superb image database system)	£85.00
FRMK	FrameMaker 5.0 (best product for long text documents)	£545.00
3GIx	Images with Impact (4000 clip art images on CD ROM)	£299.00
KPTP	Kai's Power Photos (10 CDs of quality photographs)	£95.00
PMKR	PageMaker 6.0 (power and ease of use 68k /PowerMac)	£379.00
QKXP	Quark Xpress 3.3 (the professional's choice)	£599.00
QKXZ	Quark Xpress 3.3 (Power Mac Native version)	£665.00
QK	Quark Xtensions (we carry a wide range)	please call
TYPY	Typestry (create 3D fonts with textures)	£159.00
TYSL	TypeStyler (manipulates PostScript fonts)	£99.00

FONTS

MNPF	Monotype Font CD 4.0 (Monotype & Adobe Fonts, plus more!)	£49.00
ATM	ATM 3.8 (smooths screen and print fonts)	£39.00
SATM	Super ATM (view documents without the fonts installed)	£85.00
FNTG	Fontographer 4.1 (best professional font creator)	£299.00

PRINTERS

T8	DataProducts T8 (600dpi A3 PostScript laser)	£1995.00
ECSA	Epson Stylus Colour II (brilliant quality colour inkjet)	£375.00
ECSH	Epson Stylus A3 (A3 colour inkjet, non PostScript)	£999.00
BLPEA	GCC BLP Elite 600 (fast, PostScript, 4Mb, edge to edge)	£1095.00
ELXA	GCC Elite XL608 (A3, 600dpi, edge to edge printing)	£2145.00
S600	GCC SelectPress (A3 600dpi, edge to edge)	£2995.00
HP34	HP DeskJet 340 (portable colour inkjet)	£225.00
HP60	HP DeskWriter 600 (superb new inkjet, Appletalk)	£219.00
HP66	HP DeskWriter 660C (colour and mono in one)	£289.00
LBWR	LabelWriter II (mini thermal printer produces labels)	£159.00
MLP6	Texas MicroLaser Pro (600dpi A4 PostScript)	£775.00
PWPR	PowerPrint (driver and cable for non-Apple printers)	£79.00

MONITORS

M17E	Apple 17" 1705 Monitor	£499.00
M17V	Apple 17" 1710 AV Monitor	£699.00
FR17T	Formac 17" Trinitron Monitor	£545.00
FR20T	Formac 20" Trinitron Monitor	£1249.00
RDCM	Radius Colour Pivot (unique tilt system)	£725.00
RDI20	Radius IntelliColour 20" Monitor	£1399.00
SN15	Sony 15" Trinitron Monitor CPD 15SF1	£359.00
XCVA	XClaim GA PCI Video Card	from £279.00

SCANNING

AFSA	Agfa StudioScan IIsi (2400dpi, fast, the best)	£635.00
EPSB	Epson GTX6500 (1200 dpi colour inc P'Shop & O'Page)	£425.00
SMII	Microtek ScanMaker II (great quality 600dpi)	£279.00
SCOL	Nikon SuperCoolScan (35mm slide scanner)	£1545.00
STAY	Nikon AX1200 (fast, 1200dpi res A4 desktop scanner)	£849.00
OMPP	OmniPage Pro 5.0 (OCR directly into applications)	£369.00
SP35	Polaroid SprintScan (fast 35mm slide scanner)	£1395.00
PPRT	PaperPort (mono desktop OCR and scanning)	£235.00
PPRV	PaperPort VX (greyscale desktop OCR and scanning)	£279.00
UMVC	UMAX Vista T630 (600dpi colourwith Photoshop LE)	£355.00

COMMUNICATIONS

4SIV	4Sight FaxLight (5 user network fax system)	from 445.00
MR34	Motorola 3400 (MacUser Best Buy 28.8 baud)	£165.00
PLNC	Planet ISDN Card (with Easy Transfer Lite)	£645.00
SPR1	Sportster FaxModem (14,400 baud, BABT approved)	£130.00
SPR3	Sportster FaxModem (28,800 baud, BABT approved)	£189.00
SPEA	SupraExpress FaxModem (quality, low cost 14.4 baud)	£85.00
SPEB	SupraExpress FaxModem (quality, low cost 28.8 baud)	£145.00
SPRA	Supra FaxModem (top quality, Grp III 28.8 baud)	£185.00
MICL	Personal Microphone (low cost but powerful comms)	£39.00
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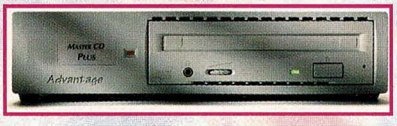

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FEHA	EtherLan Hub 9 (9 port ethernet 10baseT Hub)	£125.00
QKML	QuickMail 3.5 10 User (powerful flexible E-Mail)	£365.00
RWY5	RunShare (up to 5 times quicker file transfer)	five user £499.00
TMBK5	Timbuktu Pro (control Mac/PC screens over network)	£110.00
ASPA	AsantePrint (Ethernet to AppleTalk printer router)	£249.00
ETWx	EtherWave (daisychain Ethernet from Farallon)	£165.00
	Ethernet Cards & Tranceivers (Asante, Shiva, Focus)	from £29.00

MULTIMEDIA

ELAS	Elastic Reality (seriously professional morphing)	£195.00
MRPHB	Morph 2.5 (morph from one QuickTime movie to another)	£79.00
MDRT	MacroMedia Director 4.0 (key multimedia tool)	£795.00
PRMR	Premiere 4.0 (Adobe's brilliant QuickTime editor)	£399.00
SCRD	Adobe Screen Ready (batch proccess graphics for screen)	£99.00
TRNJ	Transjammer (100s of transitional effects for Premiere)	£69.00
VIDD	Video Director 2.0 (edit your home videotapes)	£89.00

PC COMPATIBILITY

ACPC	Access PC 3.0 (read/write PC floppys from your Mac)	£75.00
DSMT	DOS Mounter Plus (read/write PC floppys from your Mac)	£55.00
MLPT	MacLink Pro (best Mac/PC link with100's translators)	£110.00
PCEX	PC Exchange (Apple's own brand software)	£35.00
SOFT	Soft PC Universal (DOS emulation on a Mac)	£79.00
SFWA	SoftWindows 2.0 (run Windows on a Power Mac)	£269.00

INTERNET

QXOF	BeyondPress (Web Page creator plug in for Xpress)	£485.00
CLEM	Emailer (great mail program, supports many services)	£55.00
NTSCB	NetScape Navigator (best browser, includes manuals)	£50.00
NWHP	NewsHopper (easiest way to read newsgroups)	£32.00
PGML	PageMill (the ONLY way to create web pages)	£75.00
INET	Registration Kit (Internet dial up, email,Web, FTP)	£25.00
STCH	Snatcher (easy to use Internet file transfer software)	£35.00
BK5010	Internet Starter Kit (the best book)	£27.50
AW#1W	Internet Web Server (Power Mac Web server)	from £2295.00

POWERBOOK

CCPx	Carry Case (Apple or third party)	from £19.00
CPU	CPU (excellent collection of PowerBook utilities)	£55.00
CPPC	Car Power Adaptor (plug in to the car lighter socket)	£49.00
PCNA	Ethernet Card (Farallon 10BaseT PCMCIA card)	£165.00
FEVC	MV16 (16 bit colour/10BaseT Ethernet for 5300/190s)	£325.00
GPCA	PowerPort Platinum (PCMCIA 28.8 fax modem)	£449.00
BTT#	TeleAdapt (for almost every country in the world)	from £30.00
SPR9	WorldPort (28.8 PCMCIA fax & modem)	£199.00
WIZP	WizTools PowerBook (excellent suite of utilities)	£55.00

HARDWARE

KBCE	Extended Keyboard (15 function keys, numeric pad)	£49.00
QCKC	QuickCam (mono video camera for QuickTime)	£79.00
AGMJ	JetStick (joystick for the control you've always wanted)	£45.00
TMADD	Thinking Mouse (4 button with software)	£65.00
TMADB	Turbo Mouse (top selling trackball)	£75.00
WCU6	Wacom ArtPad II (handy stylus and tablet)	£135.00
WCU5	Wacom UltraPad A5 (stylus and tablet)	£279.00
WCU4	Wacom UltraPad A4 (professional stylus and tablet)	£389.00
PP##	Daystar Power Pro 601 (PowerPC accelerators)	from £415.00
CPLx	Math Co-Processor (speed up your Classic II or LC)	£35.00
VR256	256K VRAM Chips (adds more colours)	£20.00
VR512	512K VRAM Chips (adds more colours)	£29.00
VR9A	1Mb VRAM DIMM (for 7200, 7500, 8500)	£69.00
VR9B	2Mb VRAM DIMM (for 7200, 7500, 8500)	£195.00

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R23C **230Mb Optical Cartridge** £25.00
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EDUCATION

UP TO 12 YEARS

AMAN **Amazing Animation** (cool animation for kids) £45.00
KDTM **KidsTime** (5 learning programs for the 3 to 7 year old) £29.00
KDMH **KidsMath** (takes kids from counting to arithmetic) £29.00
KDPX **KidPix II** (wonderful paint program with sound effects) .. £29.00
LPCK **Launch Pad** (animated desktop, secures your files) £25.00
NMBM **NumberMaze** (award winning arithmetic tutor) £35.00
RDMZ **ReadingMaze** (letter recognition to sentences) £35.00
SPLX **Spelunx** (brilliant game-like learning environment) £29.00

FROM 10 YEARS UP

DFMZ **Decimals & Fractions Maze** (helps older kids) £35.00
TYEN **Typing Instructor** (good training from basics to touch) £25.00
VYGR **Voyager Astronomy** (fascinating desktop planetarium) .. £105.00
WIWD **Where in World is Carmen DeLuxe** (geography based) £29.00

PROGRAMMING

HYPC **HyperCard 2.3** (new version, more power) £95.00
CDWB **Metrowerks Code Warrior Bronze v7** (680x0 compiler) £95.00
CDWG **Metrowerks Code Warrior Gold v7** (PowerMac compiler) £265.00
ZCP **Symantec C++** (best object oriented programming tool) £295.00
SPCD **SuperCard 2.5** (more powerful than HyperCard) £299.00
THKC **Think C 6.0** (the leading Mac app development tool) £185.00
THKP **Think Pascal 4.0** (excellent developer level compiler) £165.00
FTBS **FutureBasic** (the best Basic for Mac, inc PG Pro) £179.00

MUSIC

BMTL **EZ Starter Kit** (MIDI interface, EZ Vision, book) £175.00
PRMC **Practica Musica** (teaches music theory and ear training) . £75.00
QBSL **Cubase Light** (entry level sequencer and csore printing) .. £79.00
SONG **SongWorks** (interactive music composition) £65.00
SPSS **Super Studio Session** (8 voice composer and player) £69.00
MDIN **MIDI Interface** £45.00

UTILITIES

PRODUCTIVITY ENHANCERS, FILE & DISK MANAGEMENT

EASE **At Ease 3.0** (secure Finder replacement) £34.00
INVU **Conflict Catcher 3.0** (INIT manager and more) £55.00
CDU **CDU** (excellent collection of Desktop utilities) £55.00
NDBP **DiskDoubler Pro** (DiskDoubler,AutoDoubler,CopyDoubler) £60.00
FTF **First Things First** (brilliant alarms, reminders, to do's) £27.00
HDTKP **Hard Disk Toolkit** (Personal Edition) £59.00
HDTK **Hard Disk Toolkit** (the best formatter and checker) £125.00
MCTA **MacTools Pro 4.0** (disk safety and protection utility) £79.00
NUM **Norton Utilities 3.1** (best selling utilities package) £79.00
NOWU **Now Utilities 5.0** (suite of essential utilities) £55.00
POPF **PopUpFolder** (view folder contents with submenus) £30.00
QCKY **QuickKeys 3.1** (macro maker, time saver utility) ..... special
RAMD **RAMDoubler** (actually doubles your available RAM!) £45.00
SPED **SpeedDoubler** (greatly improves performance) £45.00
RASP **RamDoubler & SpeedDoubler Bundle** £69.00
SFDL **Stuffit DeLuxe** (famous file compression program) £65.00
SUIT **Suitcase 2.14** (manage your font menus) £39.00

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OPDT **DeskTape** (treats DAT as if it were a 2Gb drive) £249.00
PRSB **Personal Backup** (best value backup on the market) £32.00
REDX **Redux Deluxe 2.51** (powerful floppy backup) £39.00
RTSP **Retrospect 3.0** (most sophisticated archival backup) from £145.00
SAM **SAM 4.0** (Symantec's anti virus utility) £55.00
VIRX **Virex 5.3** (best virus tracer & eradicator of all) £60.00

SECURITY

DKGD **DiskGuard** (control access to your hard drive) £69.00
FLGD **FileGuard** (serious protection for specific files) £145.00
MAD# **MacAdministrator** (secure all Macs on your site) ..... from £22.00
MPR1 **MacPrefect** (secures most aspects of the Finder) £30.00

SCREEN SAVERS

AFDK **After Dark 3.0** (famous screen saver with many modules) £25.00
DSNY **Disney Screen Saver** (simply magical) £27.00
STAB **Ultimate Star Trek** (screen saver and posters bundle) £39.00
LTSS **Looney Tunes** (famous cartoon screensaver) £25.00
TTWDK **Totally Twisted** (outrageous and irreverant) £25.00
DIRTY **Underware** (humorous screen saver) £25.00

ENTERTAINMENT

BEST-SELLING GAMES

1) A10A ✔**A10 Attack** (the best flight sim around) £39.00
2) FK18 ➢**F/A18 Hornet** (Korean Crisis mission for F/A18) £29.00
3) SIMC2 ✔**Sim City 2000** (design and run your own city) £29.00
4) FLSM ✔**Microsoft Flight Simulator** (realistic, accurate) £35.00
5) F18H ➢**F/A18 Hornet** (from the creators of Hellcats) £49.00
6) PGA3 ✔**PGA Golf III** (more challenging games) £35.00
7) ERIC ➢**Eric's Ultimate Solitaire** (a dozen patience games) £35.00
8) MRTH ➢**Marathon** (prepare to meet thy "Doom") £39.00
9) ITG10 ✔**10 Intelligent Strategy Games** (backgammon...) ... £29.00
10) LEM3 ✔**Lemmings/Oh No! More Lemmings Bundle** £22.00
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12) CRYC ✔**Crystal Crazy** (even better than Quest) £34.00
13) PLPG ✔**Links Pro Golf** (so realistic you'll think you're there!!) £32.00
14) CHCH ✔**Chess Champion** (best Chess game) £25.00
15) CRQ2 ✔**Crystal Quest 2** (Britain's favourite game) £22.00
16) BRDG ➢**Bridge** (from novice to advanced playing levels) ... £24.00
17) FSHB ✔**Flashback** (Nintendo like adventure shoot-em-up) . £25.00

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PLPR ✔**Links Pro Extra Course** (Mauna Kea) £20.00
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TRZL ✔**Triazzle** (brain teaser from Berkeley Systems) £19.00

KEY ✔ works on most Macs, ➢ Colour Macs only.

BOOKS & TRAINING

BEST-SELLING BOOKS

1) BK4075 **Mac Bible 5th Edition** £29.95
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TNxx **Toners/Ink Cartridges** (for laser & inkjet printers) ..... .call
AGxx **Anti Glare Screens** (eases eyestrain) ..... from £35.00
SESY **Security Systems** (is your Mac vulnerable to theft?) .. from £29.00

CD ROM

GENERAL/GAMES

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ALDCD **Alone in the Dark II** ("one hell of a sequel!") £35.00
7GCD **7th Guest** (an incredible real time 3D adventure) £29.00
BTCHCD **Battle Chess** (full colour animated Chess Game) £34.00
BRTM **Buried in Time** (sequel to Journeyman Project) £29.00
BRNCD **Burn Cycle** (futuristic interactive challenge) £28.00
DOM2 **Doom II** (you may have have heard of this game!) £35.00
DKFCD **Dark Forces** (brilliant game based on Star Wars) £35.00
FRKCD **Frankenstein** (interactive story, you play the monster) £35.00
FTHCD **Full Throttle** (play a murder prosecutor) £32.00
IFDCD **In the First Degree** (play a murder prosecutor) £35.00
INTT **International Tennis** (excellent implementation) £34.00
LKYC **Legend of Kyrandia** (journey through magical lands) £29.00
MRTCD **Marathon** (the best selling game even better on CD) £39.00
MRTHCD **Marathon II** (can you resist?) £45.00
MYST **MYST** (magical mystery adventure) £35.00
PRPCD **Prince of Persia I & II** (two of the best games ever) £29.00
SIMT **Sim Town** (build and run your own little town) £29.00
SIMCC **Sim City 2000 Collection** (with extra goodies) £39.00
DSCW **Terry Pratchett's Discworld** (from the novel) £35.00
EXPL **Xplora** (Peter Gabriel's amazing multimedia CD) £29.00
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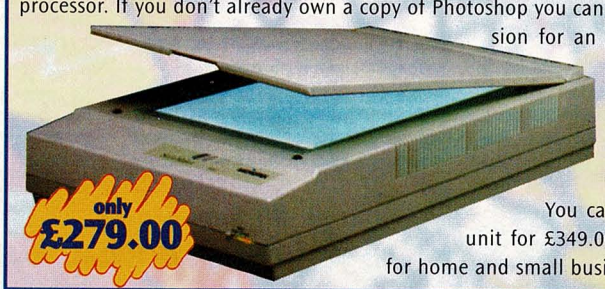

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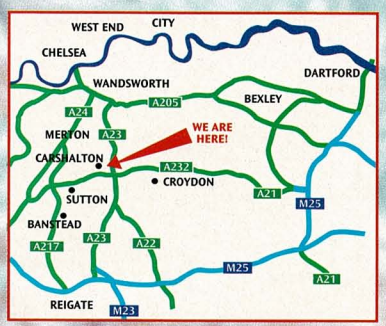

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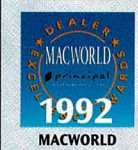

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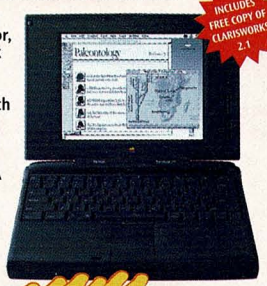

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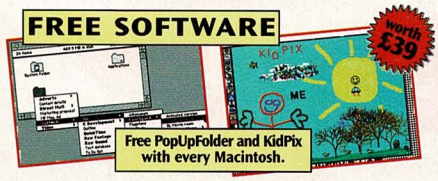

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Overleaf we explain what it means for 3D, on any PowerMac. Then we explore the new generation of software it makes possible, and new versions of 3D classics. Finally, we show you how to bring 3D to life – on your Mac or in your own hands!

3D IN DEPTH

3D Explosion! 40
How QuickDraw 3D is changing graphics on the Mac; plus Apple's new QuickDraw 3D Accelerator Card.

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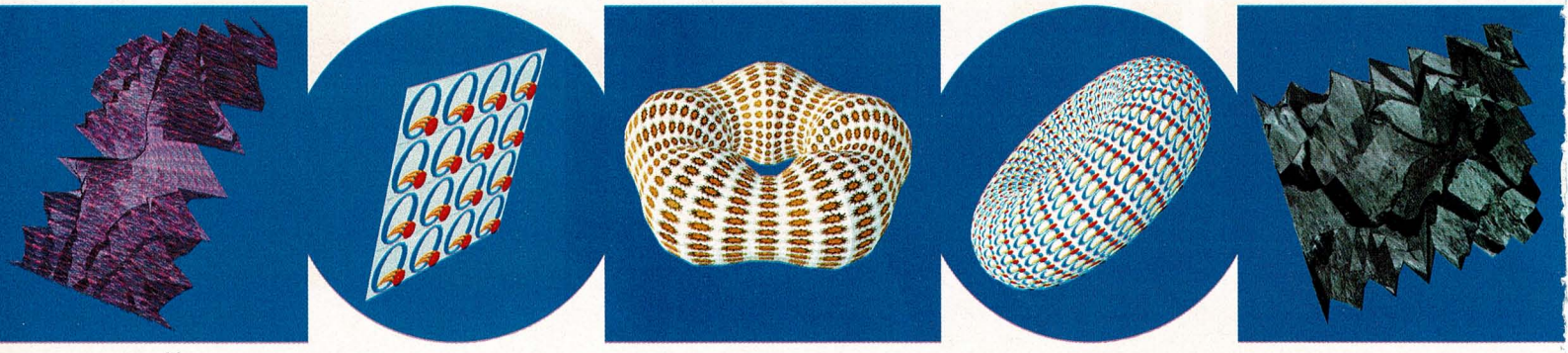
3D comes to life!

Continued on next page

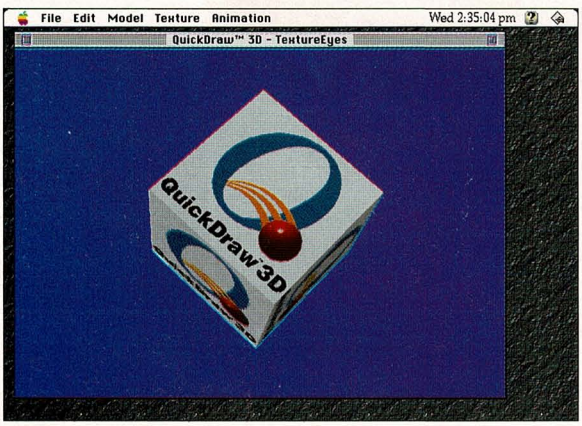


3D explosion!

Forget everything you know about 3D. Richard Hill reports on how new Apple technology is changing the old, inaccessible image of 3D, making it open to all.

You probably think of 3D graphics as something that graphic artists create and you simply view. You get to explore other people's 3D worlds in games, but when do you get to create your own? 3D, to most people, means photorealistic images that take an age to create – and that's only if you're lucky enough to have a Mac with the oomph to run the software. Right? Certainly not any more.

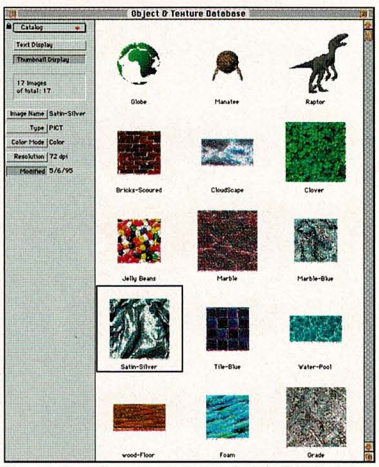
QuickDraw 3D is an ambitious attempt to redefine 3D, and make it something more people can use in more creative ways. An Extension for the Mac Operating System (OS), it enables you to create models and add textures onto their surfaces more quickly than with most other software. But that's not the half of it. QuickDraw 3D makes 3D more accessible – something you will be able to use every day in all sorts of different situations. (Potentially, at any rate. It depends very much on to what extent the software takes advantage of what QuickDraw 3D offers.)



QuickDraw 3D makes it easy to create shapes, then add textures or even video onto them. We've a selection running across the top of the next few pages.

Apple's Shaun Hopwood is part of the project. He believes that the ways in which you can use 3D have to improve if they're to meet your demands. 'One of the biggest needs is to make [3D software] easier to use. It'll take you a little while to get up and running – longer than *Photoshop* or a word processor.' He believes that 3D programs tend to be difficult to get to grips with because they don't tend to follow any conventions with their interfaces – they're all different.

Nick Thompson is a Support Engineer at Apple. He says that there are historical reasons for this lack of consistency in 3D programming, as compared to 2D graphics. '2D graphics were supported in the OS right from the start. When the Mac was shipped in 1984, we had QuickDraw and a lot of the original draw and paint packages were based on that.'



You can use Canto's *Cumulus* database to keep track of your QuickDraw 3D models and textures.

QuickDraw is a built-in system for drawing graphics on your Mac's screen. Because anyone who programs for the Mac can use this built-in system instead of having to write their own, virtually everyone does use it – resulting in consistency between 2D graphics programs, as Nick Thompson explains. '*Illustrator*, for example, although based on a fragment of PostScript [Adobe's graphics system], uses QuickDraw for its images on the Mac. And Adobe have extended QuickDraw for things like where they need to rotate text.

'The problem is there has been no support for 3D in the OS, so application developers have had to imple-

3D – A BRIEF EXPLANATION

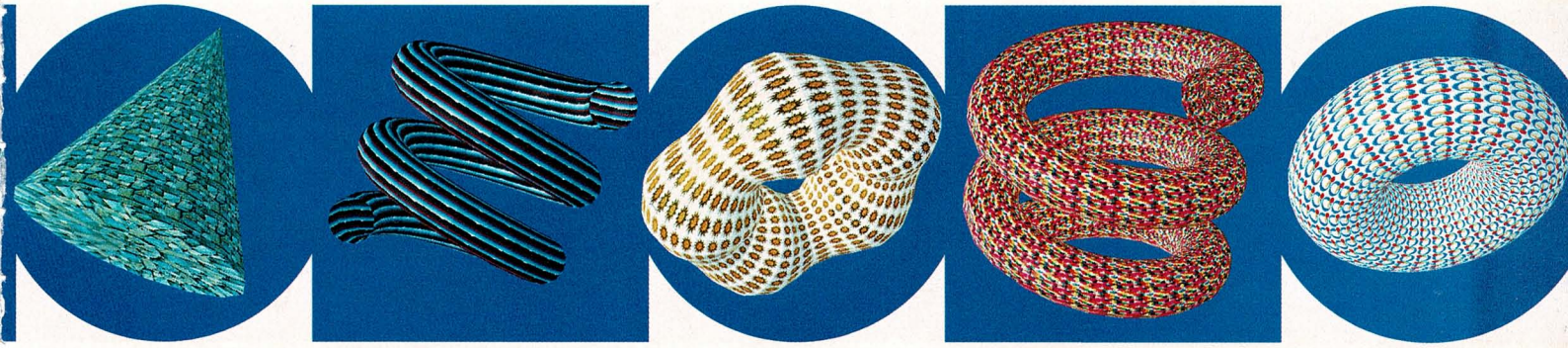
You use a couple of distinct procedures to make a 3D image. First you **model** the objects in your scene, building everything out of differently-shaped polygons. You'll usually be able to view your objects as **wireframe models**, with each object described as a skeleton-type structure.

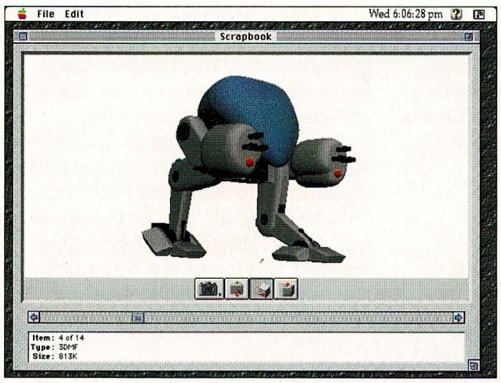
Modelling programs offer all sorts of different **geometry** tools to help you create sophisticated objects, including the ability to create basic polygon objects like cubes and spheres instantly. A **spline** tool, for example, enables you to create a more fluid, natural-looking shape than simply making a basic sphere.

You can then add light sources to your scene, which your Mac uses to work out where highlights and shadows fall. You can also pick a camera angle, the position you're viewing the scene from, and add surface patterns or **textures**.

You then need to **render** the image, which means you set your Mac off to work out how the objects, patterns and lighting all combine together, and present the result in sumptuous detail. Over the years, mathematicians have devised many ways of performing the intensive calculations needed to give fast, accurate rendering, although you'll need a maths coprocessor or FPU. A decent 3D program offers you a choice that could include **raytracing** and **Phong** and **Gouraud** shading.

Today's programs use the speed of the PowerMac to provide quick preview rendering before taking a while longer to carry out a full render once you're happy. QuickDraw 3D even enables you to preview render instantly, so you can move a light source around the model, or shift your camera position, and see how it changes as you move.





Even the Scrapbook is turning 3D. Keep your models or textures in here, and you can drag and drop them into your 3D software.

ment their own 3D library – their own geometry library, their own renderers, their own file formats – or adopt a format.' And as a result everyone has adopted different systems.

What's on offer

The big drawback with QuickDraw 3D – and it's a *big* drawback – is that it only works on PowerMacs. It just isn't possible to get it working on older Macs that don't use the PowerPC chip found in PowerMacs. As Nick Thompson explains, 'It really is the PowerPC chip that's allowed us to do this. We've taken advantage of everything we can to get really good performance.'

In many ways, the PowerMac opens up new possibilities for what you can do with your Mac – possibilities that no one could contemplate with Macs that use the traditional 68K chips. Within the next couple of years, the range of Macs will broaden – which should get more people using Macs. Accompanying this increased diversity in the Mac range is a reaffirmation of the attitude to software that has always made the Mac different from other computers – it's easy to use. QuickDraw 3D is part of a move to make programs easier to use for most Mac owners.

QuickDraw 3D uses four basic principles that can be used in any program. Software writers can adopt any or all of these principles in any software they write – and that software doesn't have to be what you'd necessarily think of as a 3D program.

The first idea and the core of the system is a new format called 3DMF (3D Meta File). All 3D programs have a file format in which you save your work. The file typically includes information about the shape of the objects you've created, what type of textures you've made, and the position you're viewing the objects from. The trouble is that at present each 3D program uses its own format – making it difficult to work on a file in one program, then move it to another. 3DMF is, if you like, Apple's official 3D format. Any program that uses QuickDraw 3D can use 3DMF files, which means you can start something in *Studio Pro*, fiddle about with it in *Infini-D* and polish it in *Ray Dream Studio*. It's easy.

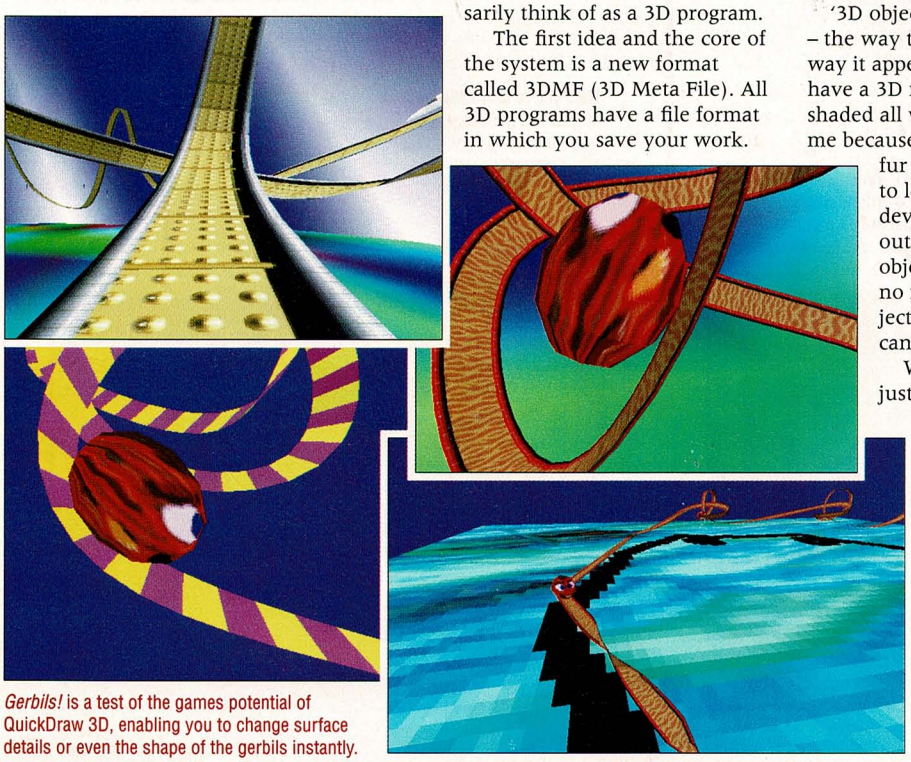
This new universal format can be used in other types of programs too, as Shaun Hopwood explains. 'We've created a viewer allowing you to embed a window in a 2D application, which allows you to import a 3D object. The developer can add 3D capability to his program in a weekend.

'We're looking to do [with 3D] what we did with the 2D market with clip art. Most people don't know how to draw. They want a picture of Santa Claus 'cause they're doing a little greeting card. So you buy some clip art, drop Santa into your design, and you're done. The same thing can be done with 3D graphics.

'3D objects are based on two things – the way the object is built and the way it appears. So, for example, if I have a 3D model of a dog and it's shaded all white, there's no value to me because I don't know how to put fur on this dog. It's not going to look like a dog. We're telling developers to put 3D models out with the appearance of the object, so that a user who has no idea how to build this object or how to texture map it can still get value out of it.'

With QuickDraw 3D, you're just as likely to see 3D in a program like *ClarisWorks* as you are in a graphics program. It will become an everyday part of using your Mac.

The second important aspect of QuickDraw 3D is that, for the first time, programmers don't have to create 3D programs from scratch. Because 3D is now a key part of the Operating System, all you have to do is use a 'call' in



Gerbils! is a test of the games potential of QuickDraw 3D, enabling you to change surface details or even the shape of the gerbils instantly.

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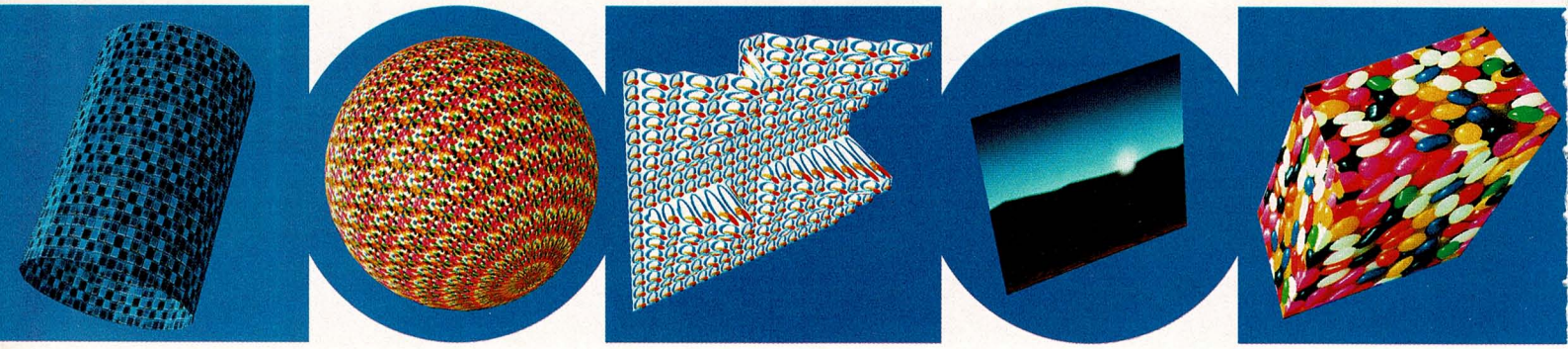


your program routine – an instruction to use QuickDraw 3D to do a certain task for you.

According to Nick Thompson, 'Putting 3D in the OS means that application developers can concentrate on the features that differentiate their program in the marketplace, and not worry about the underlying 3D library. They can just use what we supply.'

Thirdly, Apple now offer guidelines for how common parts of 3D programs should look. As a result, you, the user, will in future only have to learn one method of creating and manipulating 3D objects instead of having to learn a different way for each program. Take a look at the '3D makeover' panel below to find out more.

New directions

Finally, QuickDraw 3D is designed to be flexible. Programmers will be free to add their own ideas, taking the idea in directions no one at Apple could have predicted. This freedom transforms the system from a potential ball-and-chain into an opportunity.

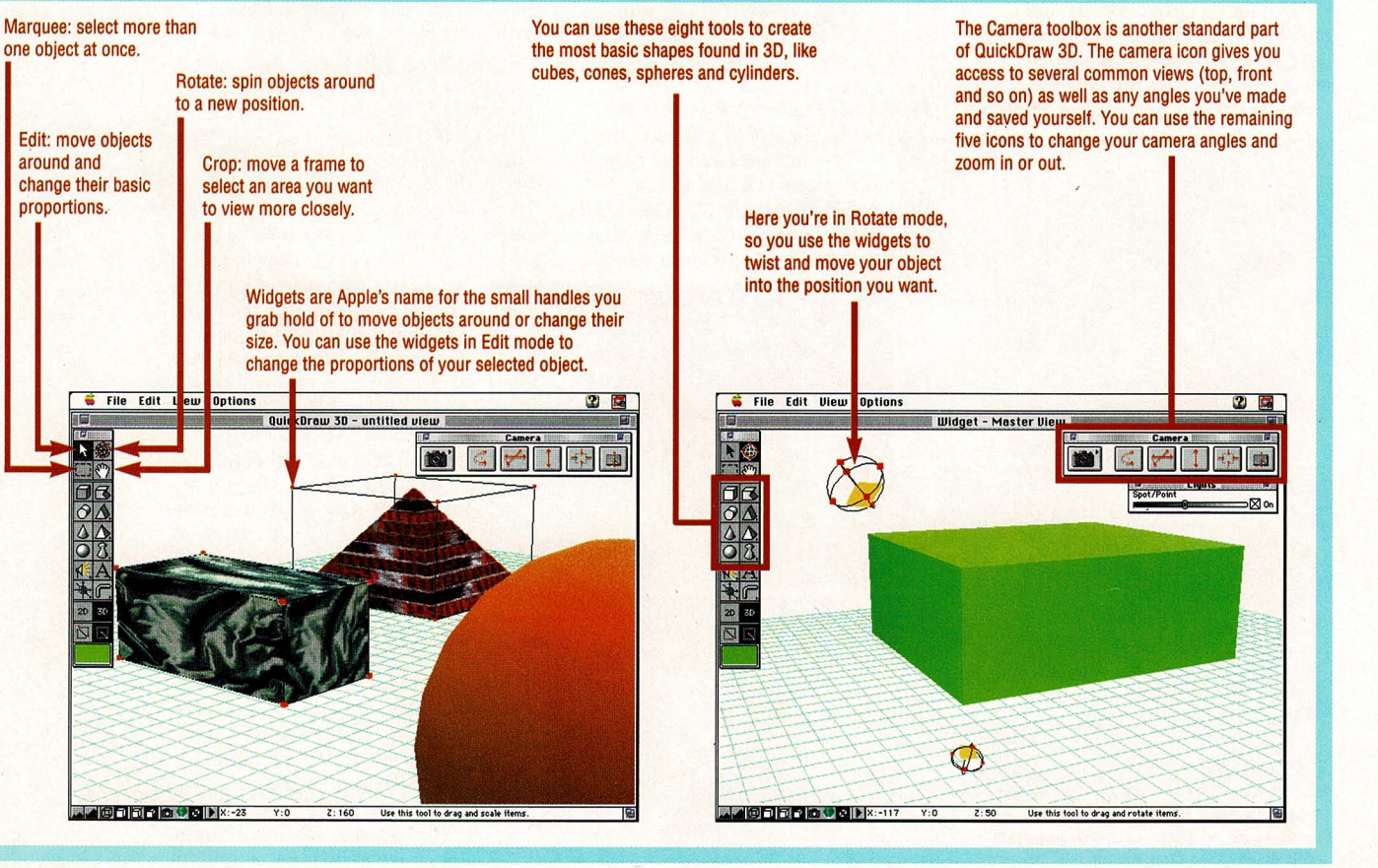
'What our customers need and what our developers want to provide probably hasn't been invented yet,' says Shaun Hopwood. 'If you're an architect, you might need a finer quality renderer, but if you're a cartoonist, you might not want photorealistic

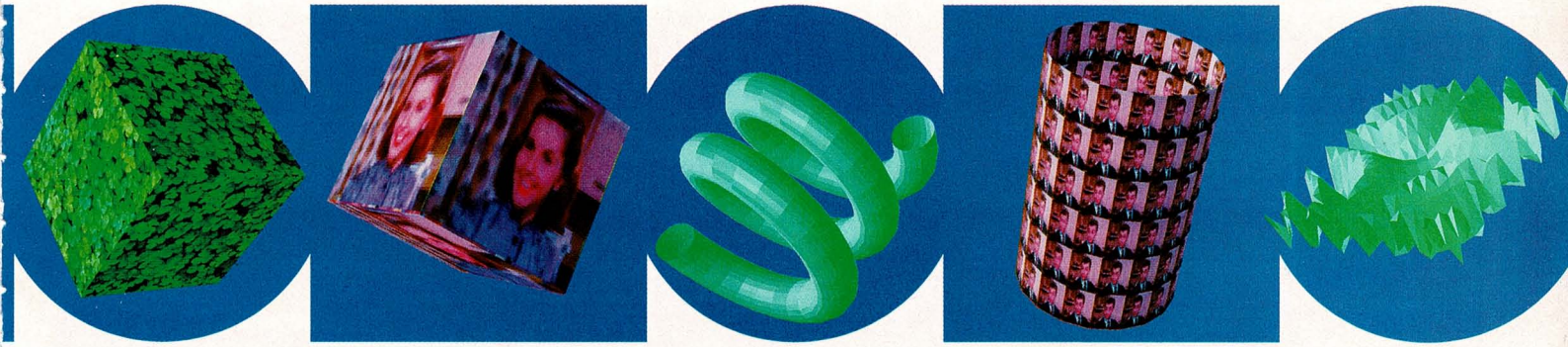
THE 3D MAKEOVER – CREATING A COMMON GROUND

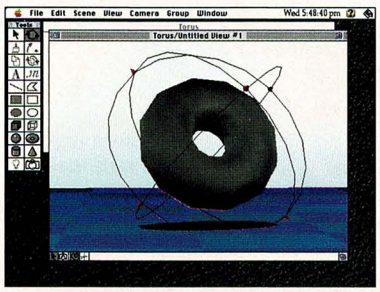
Part of Apple's mission with QuickDraw 3D is to make 3D programs easier to use by getting them to look a little more alike. 'There's no common look and feel for 3D graphics,' says Apple's Shaun Hopwood. 'Every application has a different user interface.'

As Nick Thompson explains, there's a historical reason why 2D graphics programs work in a similar way, yet 3D programs don't. 'When the Macintosh first shipped, we gave you *MacWrite, MacPaint* and *MacDraw.* If you look at *Word, Photoshop, ClarisWorks,* they're all extensions of those applications. *Word* is 20Mb and has a spell check and thesaurus, but the way you add text and select text is the same as it was in 1984. [In graphics programs] you've got the toolbox and the palette, and you pour paint in almost exactly the same way. It's evolved as the Mac has evolved, but the underlying user interface components are the same.' But a system like this has never been available for 3D graphics.

Now, though, Apple have made 3D a key part of their Mac operating system, and have introduced a set of interface guidelines to match. Microspot's *3D World* (which we've previewed on page 49) is the first program to use a lot of the suggestions for how 3D programs should look from now on, and is remarkably interactive and easy to use. Titles like *Studio Pro* and *Infini-D* aren't following these guidelines just yet, although they've been quick to bring in features like the universal 3DMF file format. You can expect more 3D graphics software to include these ideas in the months to come.


Marquee: select more than one object at once.
Rotate: spin objects around to a new position.
Edit: move objects around and change their basic proportions.
Crop: move a frame to select an area you want to view more closely.
Widgets are Apple's name for the small handles you grab hold of to move objects around or change their size. You can use the widgets in Edit mode to change the proportions of your selected object.
You can use these eight tools to create the most basic shapes found in 3D, like cubes, cones, spheres and cylinders.
The Camera toolbox is another standard part of QuickDraw 3D. The camera icon gives you access to several common views (top, front and so on) as well as any angles you've made and saved yourself. You can use the remaining five icons to change your camera angles and zoom in or out.
Here you're in Rotate mode, so you use the widgets to twist and move your object into the position you want.
File Edit View Options
QuickDraw 3D - untitled view
Camera
Widget - Master View
Lights
Spot/Point
On
Use this tool to drag and scale items.
Use this tool to drag and rotate items.





Create a shape, add basic rendering then spin it around to the position you want – it's easy.

images, which is what most people use 3D for. So we have to provide an architecture that is extensible.

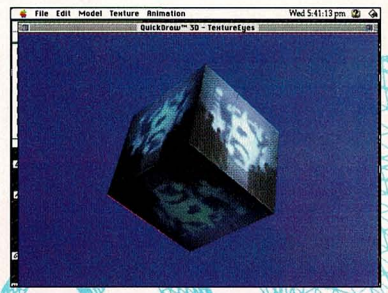
'We expect to see different kinds of shaders, renderers, new geometry types. You can save whatever you like into a model – sound or text.'

You can even build an Internet connection into a 3D model, as Nick Thompson adds. 'We have a sample in the developer's kit where you click on a face and it launches *Netscape* and goes to a particular Web page.'

QuickDraw 3D is closely tied in with the PowerMac system, and another benefit of this is that you can add hardware to your PowerMac to speed up the software. Several companies are developing 3D accelerator cards that you can slot into the PCI (Peripheral Component Interconnect) slots found in the most recent PowerMacs, the 7200, 7500, 8500 and 9500. (And you'll see PCI in more PowerMacs and Performas later this year.)

Apple already have a card called simply the QuickDraw 3D Accelerator Card, which costs around £350. It's designed to give you improved all-round performance, speeding up the manipulation of modelling and rendering by up to 12 times. It's described in more detail in the panel below.

Meanwhile, Californian firm YARC will soon release Screamer, a card that's absolutely ideal if you're creating 3D animation. It's designed to draw the basic components of 3D objects – differently-shaped polygons – very quickly. It can draw and fill in up to 300,000 triangles a second, compared to the Apple card's 120,000, but is likely to cost more once YARC sort out a British distributor. In the meantime, you can call YARC Europe in Denmark on 00 45 46 32 55 77 for more details. Screamer uses a chip called GLINT, which has been built for raw speed by a firm called 3Dlabs – expect to see more GLINT cards in the months ahead.



This cube has a QuickTime movie on its sides, which keeps playing as you move the cube.

QuickDraw 3D has a bright future ahead of it, with dozens of companies already committed to using it. We'll find out in the next year or two whether it can fulfil Apple's aim of making 3D graphics something you take as much for granted as a simple line drawing.

QuickDraw 3D Card

As 3D graphics hits the Mac in a big way, Apple have released an accelerator for use with QuickDraw 3D. What can it do?

To complement QuickDraw 3D, Apple have released an accelerator card which will speed up programs that use QuickDraw 3D, such as *StrataStudio Pro Blitz*. The card costs just £350 and is designed to provide real-time 3D object manipulation and rendering on your Mac. MACFORMAT were lucky enough to see one of these cards in action, and let us tell you, it is very impressive.

The card enables you to produce full-screen (640 x 480) animation of 3D objects at up to 30 frames per second in real-time – meaning that each frame of the animation is rendered in less time that it takes to display it on screen, so movement is flawless.

The card works by providing direct hardware support for QuickDraw 3D. At present, your Mac has to do all the calculations needed to render images on screen. With the card installed, many 3D rendering tasks are taken over by the card's custom graphics chips. The speed boost for programs that use the technology can be immense, with Apple claiming rendering speeds up to 12 times faster than non-QuickDraw-3D applications. The card supports and accelerates Gouraud rendering, texture mapping, and transparency. It does not as yet support the highly favoured raytracing method of rendering – real-time raytracing on the Mac is a long way off yet.

Apple are aiming the card at a wide audience, from professional designers and draughtsmen to 3D gurus and home users. With a price tag of around £350, it's an attractive option for those who need as much 3D power as they can get. Other companies, such as YARC Systems, are producing their own more powerful versions of the card, but these are expected to come in at a steeper price. Possibly the most attractive thing about Apple's card is that it uses a unique approach to acceleration: if you have more than one monitor connected to your Mac, both are accelerated automatically – no software patches or additional hardware needed. The acceleration is also additive, meaning that if you plug in a second card in, you get roughly twice the performance. The downside, though – and there always is one – is that the card is based on the new PCI standard. That means that it will only work in the current range of PowerMacs (the 7200, 7500, 8500, and 9500), and not the earlier 6100, 7100, and 8100 PowerMacs.

- **Price: around £350. Out: now.**
- **Contact: Apple UK on 0800 127753.**

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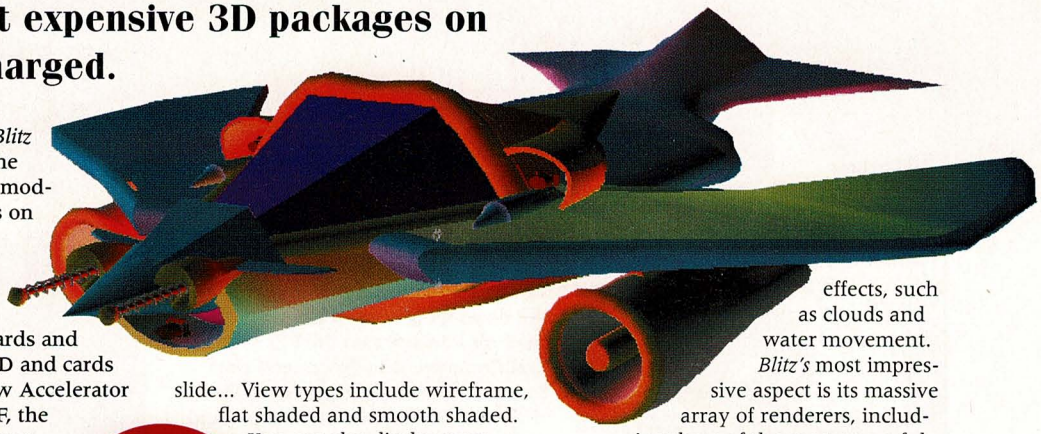
StrataStudio Pro 1.75

One of the best but most expensive 3D packages on the market gets supercharged.



STUDIO PRO

Studio Pro is best known for its role in creating the wonderful scenes in the classic CD-ROM adventure game *Myst*.

StrataStudio Pro Blitz 1.75 is one of the most polished modeller animators on the market. *Blitz*, now PowerMac-only, is accelerated for the latest PowerPC chips, DayStar's multiprocessor cards and supports QuickDraw 3D and cards like Apple's QuickDraw Accelerator Card. It supports 3DMF, the QuickDraw 3D file format, and the Internet's Virtual Reality Modelling Language, which enables you to create navigable, 360 degree 3D environments for use on Web pages.

There's a demo of *StrataStudio Pro 1.0/1.5.1* on the Cover CD

This software is not for beginners – a wealth of menus, button bars, tools and textures provide high functionality, but take a while to get used to. The interface has intuitive, well-designed tool icons and a button bar for quick access to all the modellers and texture mapping facilities. Aimed at those with a background in modelling, the comprehensive manuals contain excellent tutorials, revealing the otherwise hidden power of the software.

The windows are configurable to various sizes – PAL, NTSC, 35mm slide... View types include wireframe, flat shaded and smooth shaded. You can also display your objects' textures on screen, but this requires a lot of memory, and the textures are only approximations – it's really just for show. The easiest way to see your textures correctly is still to choose a simple renderer and render a preview scene. If you have a QuickDraw 3D Accelerator card, you'll be able to see transparency while working.

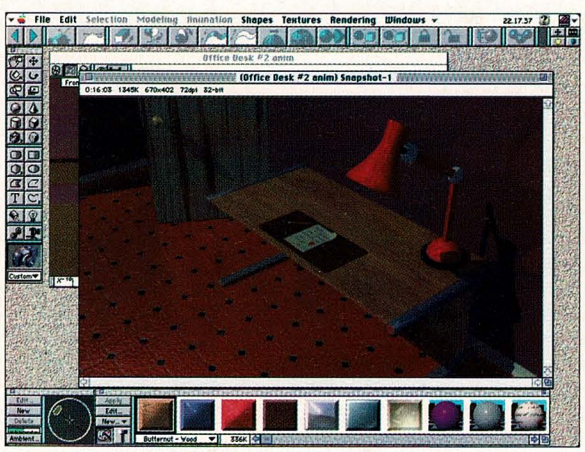
The modellers are comprehensive, including all the standard modelling tools and geometries: Extrude, Lathe, Sweep, Facet, Smooth and Skin. All of the most common 'power' modelling features are also included – 3D Sculptor and Boolean Modeller among them. You can also create 2D shapes to use within the other modellers, instead of having to import artwork from another package.

Blitz's animation features are equally good. Strata have incorporated the standard timeline and event marker system seamlessly, so if you're familiar with this concept you'll have no problem getting used to scripting animations; otherwise, the manual takes you through from animation concept and principles to scripting and managing your sequences. Extra tools, such as Explode, Shatter, Atomise, Morph and Warp, enable you to add fantastic effects to your animations. One minor niggle: there is still no inverse kinematics support. But there are third party Extensions for other 'real world' effects, such as clouds and water movement.

Blitz's most impressive aspect is its massive array of renderers, including three of the most powerful raytracing and rendering facilities we've seen in any 3D package: the Raytracer is comprehensive and incredibly fast; the RayPainting renderer enables you to render your images as if they were painted in various painting styles; and the RayDiosity renderer contains algorithms that bounce the light around the scene, retaining colour value, degradation and pick up through and from transparent and reflective surfaces. The penalty is that it can take an eon to render your scene. The newest addition to the rendering fold is the ability to create QuickTime VR movies and objects in conjunction with Apple's QuickTime VR Authoring Suite and Navigable Movie Player.

Capable of creating complex geometries resulting in detailed and realistic stills and animations, *Blitz* is at the forefront of 3D software technology – a master craftsman's tool. But watch out for other studios appearing in '96 that potentially offer just as much at a considerably lower price. **MARC WOODS**

Direct access to the three preview modes is available in all scene and camera windows in the top left of these windows. The first is the simple wireframe, then Flat Shaded, with or without black wire lines, and the last is the Smooth Shaded option, with or without texture previews.



It took just 16 minutes to render this still on a 6100/80. The info line at the top tells you the time taken, file size and resolution and image bit depth.

Here, using the Boolean Modeller, a hole has been punched through the head and a beam placed through that hole.

STUDIO PRO BLITZ 1.75

Price: £1,195. **Out:** now.
Requires: PowerMac, 16Mb of RAM, QuickDraw 3D (supplied), 256 colour monitor (16 or 24 bit preferable), 20Mb of hard disk space.
Contact: Gomark on 0171 731 7930.

FEATURES 95%
A wealth of functionality, well polished extensions and tools.

EASE OF USE 90%
Not aimed at beginners.

DOCUMENTATION 90%
Excellent. Technical information, tutorials and help all round.

VALUE FOR MONEY 85%
Aimed at professionals, with a price tag to match.

MACFORMAT RATING 92%

Infini-D 3

There's a demo of *Infini-D 3* on the Cover CD for you to try out

The easiest Mac 3D program has just got easier and more powerful to use.

I*nfini-D* is an all-round 3D modelling, rendering and animation package that aims to be simple and intuitive, yet powerful.

Most features of *Infini-D 2.x* were described in the 3D tutorials in MACFORMAT 21 to 26, so here we'll look at the new features and what's missing.

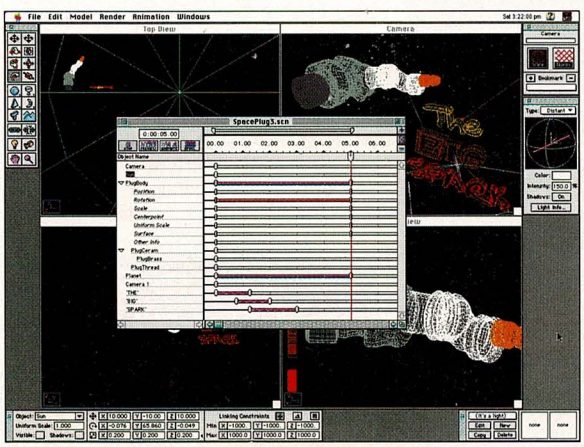
Initially, version 3 doesn't seem a huge upgrade, providing small, much needed improvements on many fronts. Probe deeper, though, and you find more significant features: spline edited 'organic' objects, individual object time-lines, visible and editable motion paths, and support for QuickDraw 3D with the free 3.1 upgrade.

Infini-D has a simple and clean interface that looks dated, but the intuitive feel has been improved by moving the view controls – navigation, display and bookmarks – to the main tool strip and a floating Views palette. The versatile front/back, left/right, top/bottom and camera choices of view remain, but the standard views are orthographic (no perspective). Why?

Object creation in *Infini-D* has always been simple and obvious – you use the tool strip icons to place basic primitives, extruded and lathed objects, terrains and text onto the workspace. You can then edit these in a separate, uncluttered workshop. This procedure has been developed so that most objects can be refined in the workshop using spline tools with familiar Bezier 'handles', enabling you to create a larger range of organic objects. A new class of Spline Form objects is especially useful and easily edited with smooth curves. The lack of numeric modelling controls limits its use to product designers, but it's great for creating smooth transformations.

Surface composition has always been one of *Infini-D's* strong points, and this has changed little apart from a new mapping type – Texture Locking. When locked, applied textures conform to object shapes during morphing, enabling realistic looking, organic transformations, the textures stretching and flexing with the object.

Lighting has been improved and has a floating palette. A distant light effect means no more dragging lights off to create suns. Lights also have fall-off control, creating softer edges, but shadows are still sharp edged. Built-in gels and masks for spots soften lighting, but atmospheric lighting – such as smoky rooms, foggy street lamps, misty sunrises, lightning flashes – are difficult or impossible to create.



The *Infini-D* animation sequencer has always been good – now attributes can be controlled individually (as shown with the PlugBody here).

The default layout sizes itself to suit your monitor. The view windows allow just enough room for the various floating palettes, which are shaped to fit into narrow gaps. Notice the new Lights Floater.

Animation is also improved with individual object attribute timelines, visible motion paths and velocity control. Sadly, there are no inverse kinematic effects, but the new spline-based objects can control smooth bending and morphing effects.

Infini-D has always been usable yet powerful enough to be used for most forms of visualisation. But it's also unsubtle, forcing you to construct objects with fairly inorganic forms, render them with unsophisticated light sources, and animate them in fairly mechanical ways. For artists and illustrators especially, the final images are often a disappointment.

Version 3 partly resolves these problems with organic modelling tools and greater control over lighting and animation. For non-technical users though, realistic atmospheric lighting effects, soft shadows, and more easily articulated objects (inverse kinematics) are still needed. Inevitably, this means more powerful Macs and more sophisticated software. Which brings you to the dilemma: other 3D packages may be cheaper and add more sophisticated features, but will they also be as easy to use as *Infini-D 3?* **BRIAN LARKMAN**

INFINI-D 3.1

Just before going to press we received an update to *Infini-D 3.1*. New features include QuickDraw 3D support, ray-tracing optimisations, QuickTime mapping improvements, QuickTime VR, and drag and drop support.

Apple's new QuickDraw 3D technology is going to make a major difference. For example, in the real world, you'd intuitively adjust an object, light or camera position to create an ideal balance of light and dark. Previously this has been impossible, except on high-end workstations – now it can be done with instant feedback on a modest Mac.

Support for Apple's 3D metafile (3DMF) format for 3D objects will enable you to effortlessly transfer fully textured objects and lit scenes between programs. This should promote the development of third-party programs for specific, limited tasks.

Drag and drop support adds a powerful tool: any Finder window containing texture files visible from *Infini-D* can be used to drag textures onto objects, ready to be adjusted.

INFINI-D 3.0

Price: £703.83. **Out:** now.
Requires: Quadra or better, 8Mb of RAM, System 7 or later, QuickTime recommended.
Contact: Gomark on 0171 731 7930.

FEATURES 80%
All the basic features you would expect, but nothing special to distinguish it.

EASE OF USE 85%
The easiest in its class – at the moment!

DOCUMENTATION 85%
Excellent manual and good tutorials.

VALUE FOR MONEY 70%
Expensive for a program so obviously aimed at the non-technical.

MACFORMAT RATING 83%

INVERSE KINEMATICS

Inverse kinematics is a principle of 3D modelling, enabling you to more easily create and animate 3D human forms. Objects are linked to those behind them so that the whole body moves as naturally as possible – so if you rotate your model's hand it pivots at the wrist and moves independently of the rest of the body. *Poser*, which scored 75% in MACFORMAT 29, is a package specially designed to do this.

Continued on next page

Amapi 2

Try *Amapi 2.0* for yourself – there's a demo on this issue's Cover CD

A powerful new modelling and rendering system that could transform the way you use 3D.

3D applications seem to incite software developers to experiment with unique, quirky or downright perverse user interfaces – an attempt to find an easier way to control the 3D creative process perhaps? The most original and intuitive (or pretentious and irritating, depending on your point of view) is that of *Amapi*, a 'creative 3D workshop'. Whatever you think of its visual style, *Amapi* offers extremely powerful functions which cannot be ignored.

The first thing to strike you on launching *Amapi* is the interface – a set of curious game-like icons scattered in a curve across the top right corner of the forbiddingly black screen, and a useless wireframe 'workbench' sitting in the foreground.

At first, the lack of a 'normal' Mac Desktop layout – simple grey 3D icons and white background – coupled with a heavy reliance on the keyboard makes the learning curve very steep. But give it a chance – once you have learned how to use the icons, you won't easily forget. The three sets of icons – construction, modelling, and assembly – are all equally distinctive, and represent a powerful range of functions. Sweeping your pointer off the screen to the right alternates between the icons.

Power tools

For construction, the usual primitives, Sphere, Cube, and Rectangular Surface are provided, plus the commonly used Extrusion, Sweep (lathe), and Hull (loft) construction methods. There is also a 2D drawing set, which includes Bezier and NURBS functions and a brilliantly interactive Thickness tool. Modelling tools include Stretch, Mold, Bend, Fillet, Punch and Boolean operations, and a fast and interactive Smoothing function. While to assemble your parts into an object, Move, Rotate, Snap, Weld, Mirror and Duplicate tools are available, along with a unique ability to Unfold objects to a flat 'net'.

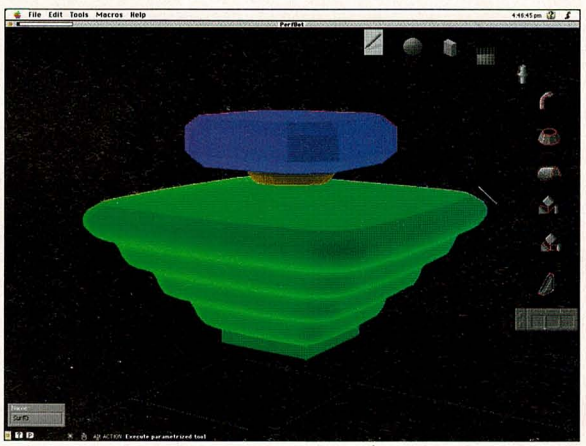
Amapi offers you a powerful and comprehensive set of tools with a degree of real-time interactivity and control that is rare at this price. The interface is fast, once you have climbed the steep initial learning curve, but the biggest disappointment is its rendering capability. The Gouraud 'Fast Shade' mode is reasonable enough, but the built-in 'Smooth Shade' process, where textures, materials and lights are applied, is basic and clunky by contemporary standards. However, for an extra £100 your version of *Amapi* bundles a separate rendering program, *Atlantis Render*, which is a great improvement. *Atlantis* provides everything you would expect from a budget price system, plus almost real-time updating (on a PowerMac 7100, anyway) of most of the dialogues, using a low resolution preview window. This enables you to interactively adjust even lights, textures and transparency parameters, so that the final render is predictable, saving huge amounts of time.

Let's hope that the two developers, Yonowat and Abvent, can integrate these two innovative and powerful systems for version 3. And would every other 3D developer please note: real time updating of lighting previews is essential.

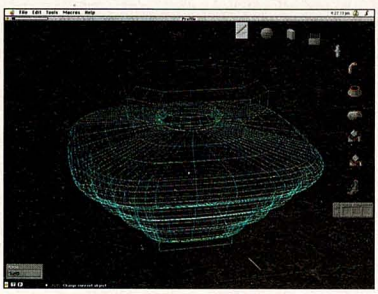
Brian Larkman

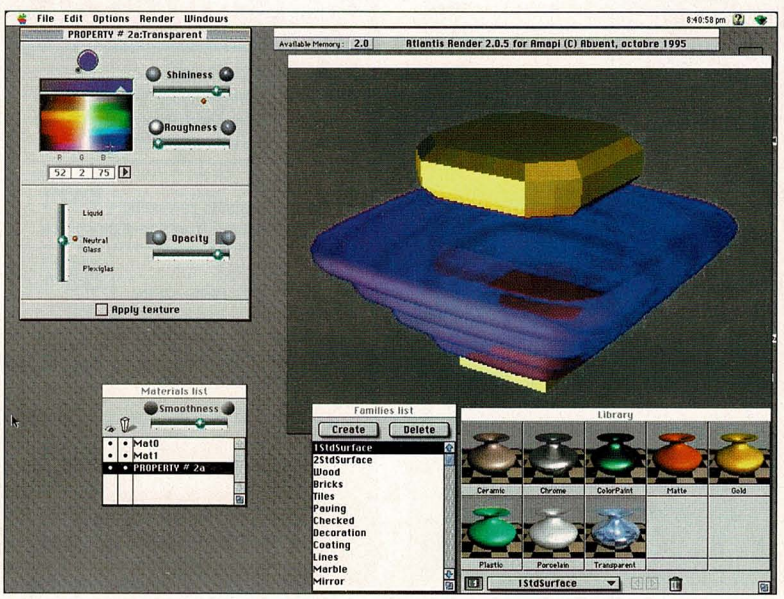
FPU

An FPU (Floating Point Unit) is a maths co-processor chip. It speeds up software that requires a lot of mathematical calculations – such as 3D graphics programs. The lowest in the Mac range to include an FPU is a Quadra.



The model can be rendered in this 'fast' mode at any time during the modelling process, to give a rough idea of its appearance. Materials and textures can only be applied using the rather crude and unintuitive Smooth Shade tools, a major letdown for the program.





The *Amapi* interface is perhaps the most curious of any current 3D program, but, once learnt, it works well. This is just one of the three sets of icons – the Construction Tools. Notice the 'depth cued' wireframe display.

The interactive thickness tools enable a normally infinitely thin surface to be given thickness and solidity. Here one facet (top left side, edged in red) is adjusted interactively in real time using the numeric keypad [+] and [–] keys.

Amapi 2/ Atlantis

Price: £249 (£349 with *Atlantis*). **Out:** now.
Requires: Quadra or better, 16Mb of RAM, System 7 or later, 256-colour monitor, 20Mb of free hard disk space.
Contact: CGS ComputerBild 0181 679 7307

Features 80%
Powerful (NURBS, Solid Modelling and Unwrapping), but unconventional.

Ease of use 70%
Very steep learning curve – but very fast once you're up there!

Documentation 65%
Quirky manuals, slim tutorials.

Value for money 70%
Reasonable for such a powerful renderer.

MACformat rating 75%

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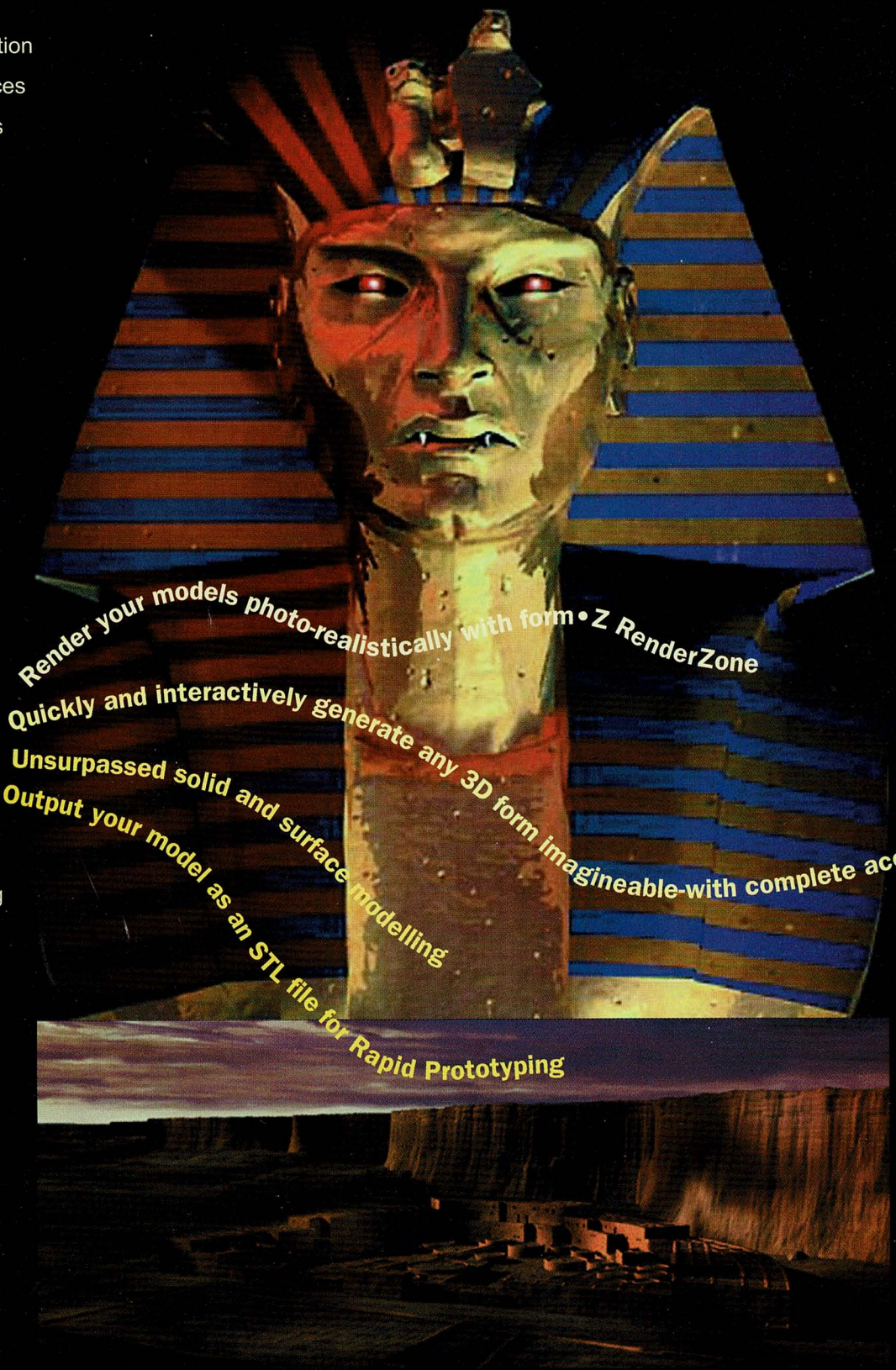
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3D World

There's a demo of *3D World* on the Cover CD – take a look for yourself

We preview an inexpensive 3D modelling package with some interesting and original features.

3D World is one of the first of a new breed of programs on the Mac: first, because it is PowerMac only, and second, because it is really only a 'shell' for Apple's powerful new QuickDraw 3D Extension.

3D World is the most interactive 3D modelling package you'll have seen, enabling much easier object and scene creation. Everything works in real time – you can manipulate the objects and the scene while updating the 3D picture, as you move the mouse for the desired effect. It is hardware intensive – to use the software constructively, you'll need 16Mb of RAM. Without that amount you can't use QuickDraw 3D, although there are rumours that it might work with 8Mb and *RAM Doubler* installed.

The work environment is bland: a short menu bar, the QuickDraw 3D Camera palette, the arbitrary Tools palette and a new document window with another toolbar in its base giving quick access to various menu functions. There are good keyboard shortcuts all round, and the icons are easily recognisable. Most of the usual modelling tools are included, with the exception of any drawing or Bezier spline based creation tools – if you're a serious or even intermediate user, you'll miss these tools. However, like a growing number of programs, *3D World* supports its own plug-in architecture. This means that anyone with access to the plug-in format of this program (shareware developers or any companies that license the architecture) can produce their own. 3D World comes with several of its own plug-in geometries and modifiers – listed in the panel below.

Since *3D World* offers no rendering options other than those available in QuickDraw 3D itself (wireframe, flat-shaded and smooth), its uses are limited to simple modelling. It's therefore best suited if you want to learn how to model. But with its plug-in architecture, the possibilities for expansion are enormous. You may see real drawing tools, third party renderers, more complex geometries (such as editable Bezier spline and polygonal mesh objects) sometime in the future.

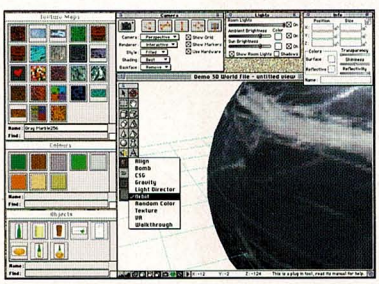
3D World's simplicity and ability to accept plug-in toys appear to aim it firmly at the younger market of cyber children, who are now gaining access to the kind of equipment needed for a product such as this – from early secondary school to late teens, perhaps.

The package also contains a 'Librarian' – a sort of advanced Scrapbook for assembling model objects, colours and textures into libraries, to use with *3D World* or any other program that fully supports drag and drop. *3D World* is also AppleScript savvy, and the latest beta, which we tested, appeared to be problem free.

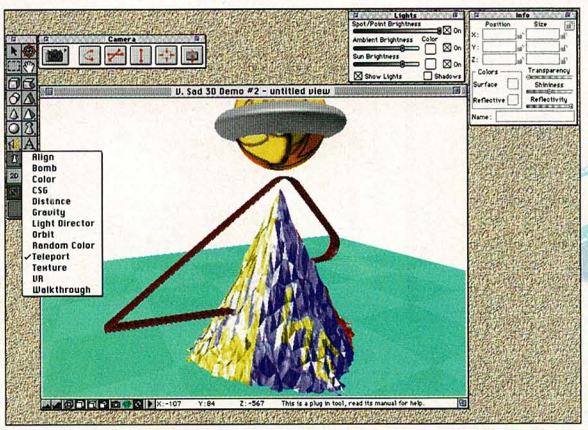
This is a great program if you want to introduce 3D to your children, or if you're not that interested in final scene renders. If you have twice the money, and you're willing to sacrifice interactivity, virtually every other 3D program out there has more advanced interfaces and functionality. The plug-ins of the future will be the make or break for *3D World*.

Marc Woods

Price: £116.33. **Out:** next month.
Requires: PowerMac, 16Mb of RAM, System 7.1.2, QuickDraw 3D, 256-colour monitor (but optimised for 1,000s of colours).
Contact: Microspot on 01622 687771.



The Orbit tool enables free orbital movement, like the shots you see in *Star Trek* when orbiting around planets. Again, this is a real-time filter.



The teleport plug-in can take you to a viewpoint at the centre of an object you click on. This can be used rather like 'camera' facilities in other modellers, if the object you teleported into is then deleted.

Systems...

If you have System 7.1.2, make sure you have the Drag Manager installed before trying to run *3D World*. If you have System 7.5, don't worry – it works automatically.

Continued on next page

Plug-in and play – 'plug-ins' supplied with 3D World

Plug in geometries (extra predefined object types):

- Pipe tool for creating pipes along a definable path (no support for curves).
- 'Mountains' tools give you what appear to be fractally generated mountains, either a single or a large group are available.
- Torus tool for creating doughnuts. (Why *are* 3D modellers so obsessed with creating objects that resemble sugar coated food?)

Plug in modifiers:

- Align tool, for aligning objects. Nothing new here...
- Bomb tool – spend hours creating a model and watch it explode.
- The Colour tool, for directly applying colours to selected objects.
- CSG tool – perform subtractive Boolean operations on objects in real time. This makes the most of the PCI PowerMac and Apple QuickDraw 3D Accelerator you've spent a fortune on.
- Distance tool – measure the distance between points.
- Gravity tool – simply drops a selected object to the baseline grid in the working window.
- Light Director tool – manipulate and direct light sources in real time, showing the effect of the light on other objects.
- Orbit tool – select an object such as a globe (which you can create by wrapping the world map from the Scrapbook around a sphere object), then select this tool. You can fly around the globe as if you were orbiting it.
- Random Colour tool – click on an object and watch its colour change, randomly...
- The Teleport tool – can be used as camera objects are in other modellers. Select 'Teleport' and click on an object in the scene to take you to a viewpoint in the centre of that object relative to your original view. Can create strange but useful viewpoints in your scene. Results often odd.
- The Texture tool – more access to QuickDraw 3D's texture-mapping abilities, enabling you to scale up and down maps and number of repetitions of the texture on an object.
- The VR tool – the same movement options available in QuickTime VR movies (pan and tilt). Hold down **[Command]** for other movement options...
- Walkthrough tool – enables you to walk through your scene.

Extreme 3D

From the creators of *Director* and *FreeHand*, we preview Macromedia's new powerful 3D program.

Macromedia are introducing *Extreme 3D* as part of their plan to offer a complete set of tools for creating multimedia. The range is centred around *Director*, their popular multimedia authoring program. *Extreme* is seen as your 3D creator, enabling you to assemble exotic computer animations ready to use in multimedia titles, for example.

You can use the program to model and render entire 3D scenes, then move objects within the scenes to build up QuickTime movies. Your selection of modelling tools includes the standard features, such as creating basic shapes, but its real strength lies in the variety of spline-based tools it offers. With these, you can precisely bend and twist objects to construct natural-looking forms. You can begin creating your object in a 2D drawing program like *FreeHand*, then bring it into *Extreme* to give your image depth.

When you're adding textures to your object surfaces, you can mix your own from a basic set of patterns. The idea is to provide you with more options for your design, without increasing the number of textures your Mac has to store. You can also create textures from image files saved in PICT format.

Macromedia have used a way of working out the final rendering called scanline. *Extreme* renders one line of the image at a time, from top to bottom – similar to the speedy rendering in *KPT Bryce*. It's faster than the ray-tracing method of rendering, which works with the whole scene at once.

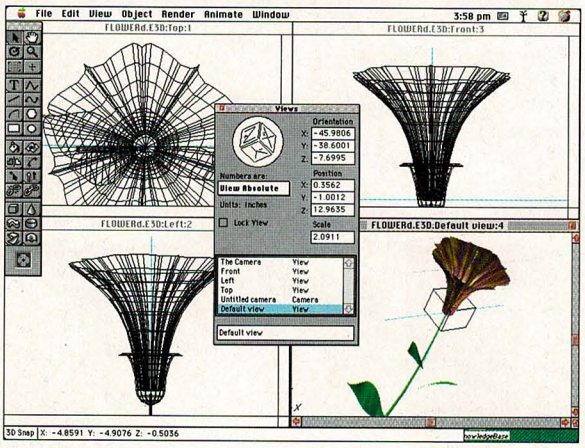
Extreme 3D features a range of animation tools to take the drudgery out of making impressive movies. Every aspect of a scene that you're able to change can also be set to change over time, while your Mac creates the frames that make up your sequence.

You can change anything from the shape of the models to their positions or even lighting. You can also link objects together – so if a light is pointing at a car model, it will automatically track the movement of the car as you adjust it frame by frame. You can preview the sequence in real time with the wire frame view.

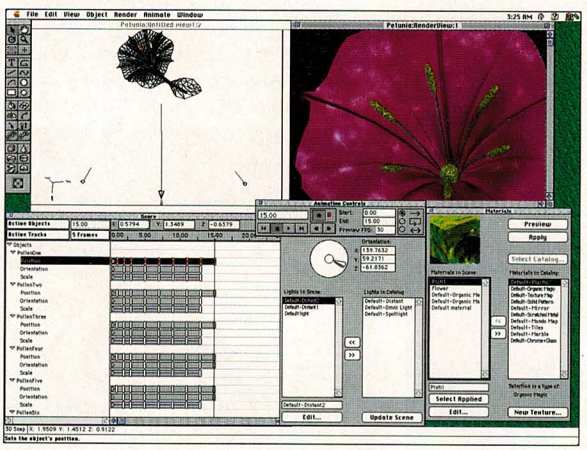
While the first version of *Extreme 3D* won't use QuickDraw 3D, Macromedia have said they'll be including it later. This means that you'll be able to mix *Extreme 3D's* exciting set of versatile features with your other software more easily.

RICHARD HILL

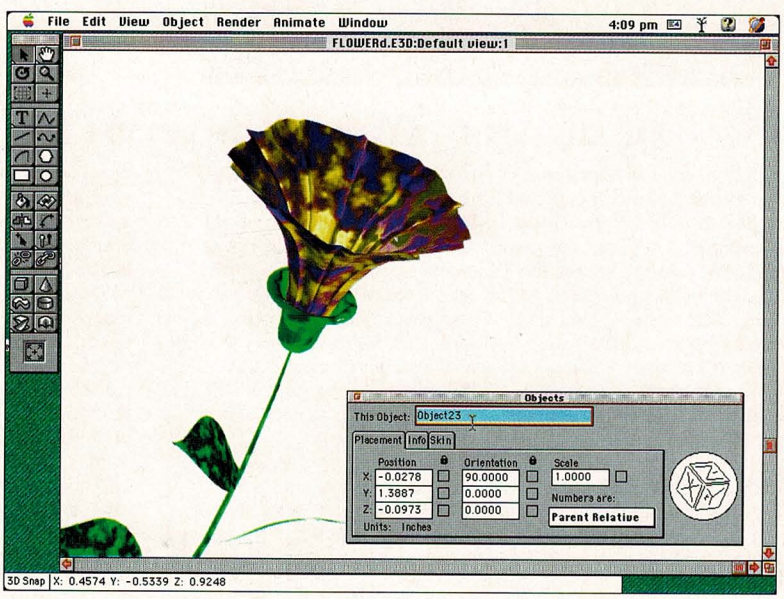
Price: £705. **Out:** this month.
Requires: Quadra or better (maths co-processor required), PowerMac recommended, 16Mb of RAM, System 7.1 or later, a 256-colour monitor and a CD-ROM drive.
Contact: Macromedia on 01344 761111.



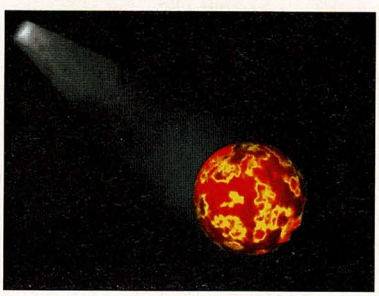
You can use features derived from the drawing tools you'd find in *FreeHand* or *Illustrator*.



Extreme 3D features a wide range of tools for modelling, rendering and animating 3D scenes.



The spline tools enable you to create flowing, natural forms that you can add textures onto.



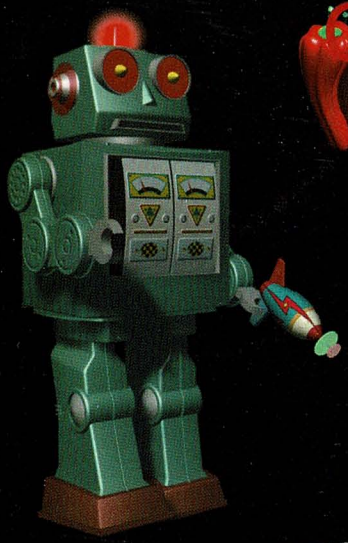
Extreme 3D provides you with a selection of dramatic lighting effects and textures – but you can also make up your own.

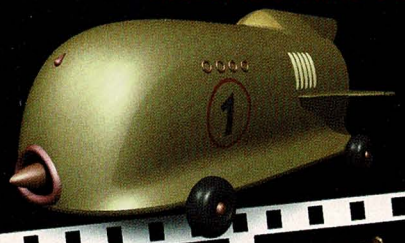
ChiLi Con GrAphiCs !

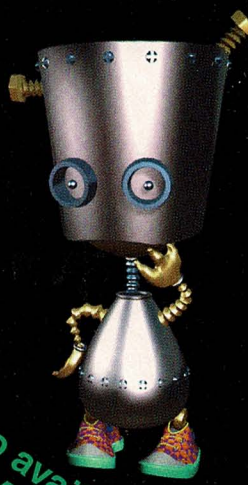
AMAPI

REAL WORLD 3D

YoNoWAT







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Images and models: Pierre Bretagnolle, Yann Le Coroller, Bruno Vaerman. Images rendered with 3D Studio, Electric Image and Studio Pro.

Ray Dream Studio

We preview *Ray Dream Studio*, a whole suite of utilities for creating and animating 3D graphics.

Ray Dream Studio is an entire suite of 3D imaging tools, comprising *Ray Dream Designer, Ray Dream Animator, Dream Models* and the *Extensions Portfolio*. It enables you to create and animate 3D models and scenes using textures, light sources, shading and the full gamut of 3D imaging tools.

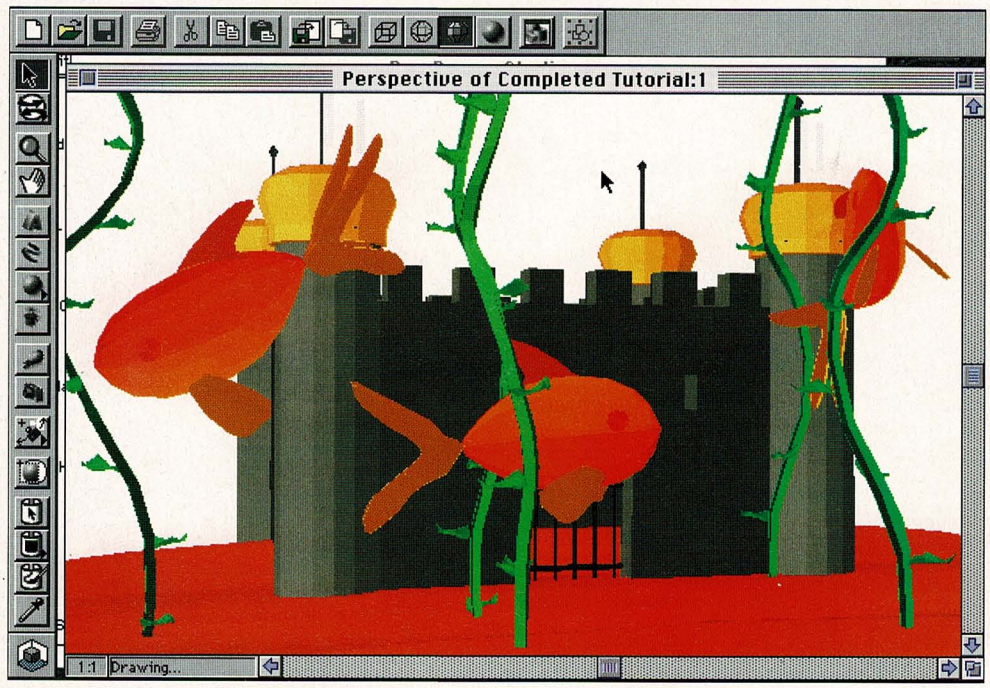
Ray Dream Designer is where you build and edit your 3D objects, including perspective, shadows, special lighting effects, textures and reflections. Step-by-step walkthroughs help less experienced users build complex objects and scenes. If time is short, or your artistic talents are not what they might be, you can work with the images from the Dream Models supplied with the package. There are also over 500 editable texture/shader combinations to apply to your objects, all accessible from a floating palette.

Ray Dream Animator is where you can bring your 3D objects to life, including inverse kinematics, total control timelines (timeline editing of all object parameters), tweeners, object deformation and object behaviours. *Ray Dream Animator* also supports rotoscoping, where you can include real-time movie clips as textures on objects or backgrounds.

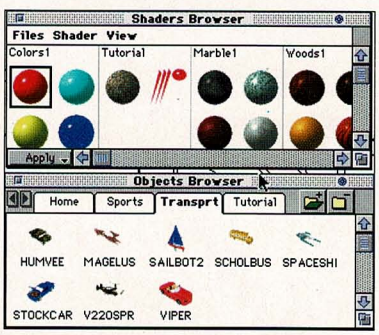
The Dream Models are a collection of 500 textured 3D models which are fully editable, while the Extensions Portfolio is a selection of additional 'plug-in' features. *Dream Studio* is built with an 'extensible' architecture, which means third-party suppliers and programmers can write additional functions and routines that add to the software's abilities.

Ray Dream 3, released in 1994, was the first 3D illustration application available on both the PC and Macintosh, which was good news for those who needed to transfer files between the two platforms. *Ray Dream Studio* adds 3D animation to the original feature list, as well as numerous other enhancements. **ROD LAWTON**

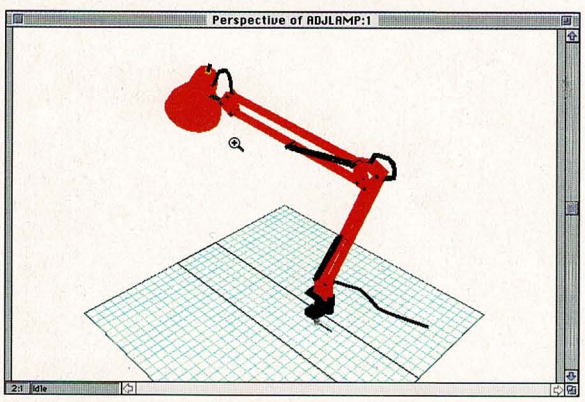
Price: £441. **Out:** now.
Requires: any colour Macintosh, 8Mb of free RAM (11Mb of RAM recommended), System 7 or later, 40Mb of hard disk space.
Contact: Principal on 01706 832000.



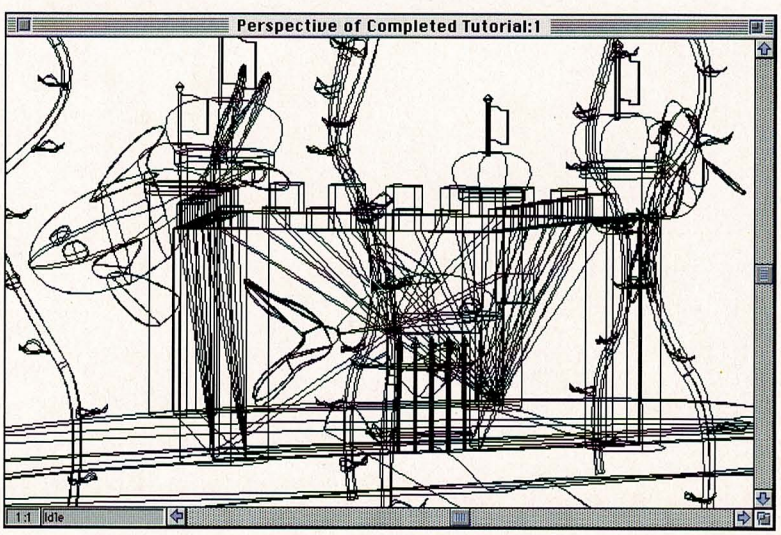
You can use *Ray Dream Designer* to build whole 3D environments, given enough imagination, time and RAM.



Ray Dream Studio includes Dream Models – a collection of 500 fully editable 3D objects. There are also 500 pre-made shades/textures.



If time is short or your creative talents need a bit of a kick-start, you can use one of the many 3D objects supplied with *Ray Dream Studio*.



3D scenes can be viewed and edited as wire-frame graphics – rendering scenes in filled 3D takes anywhere from seconds to minutes.

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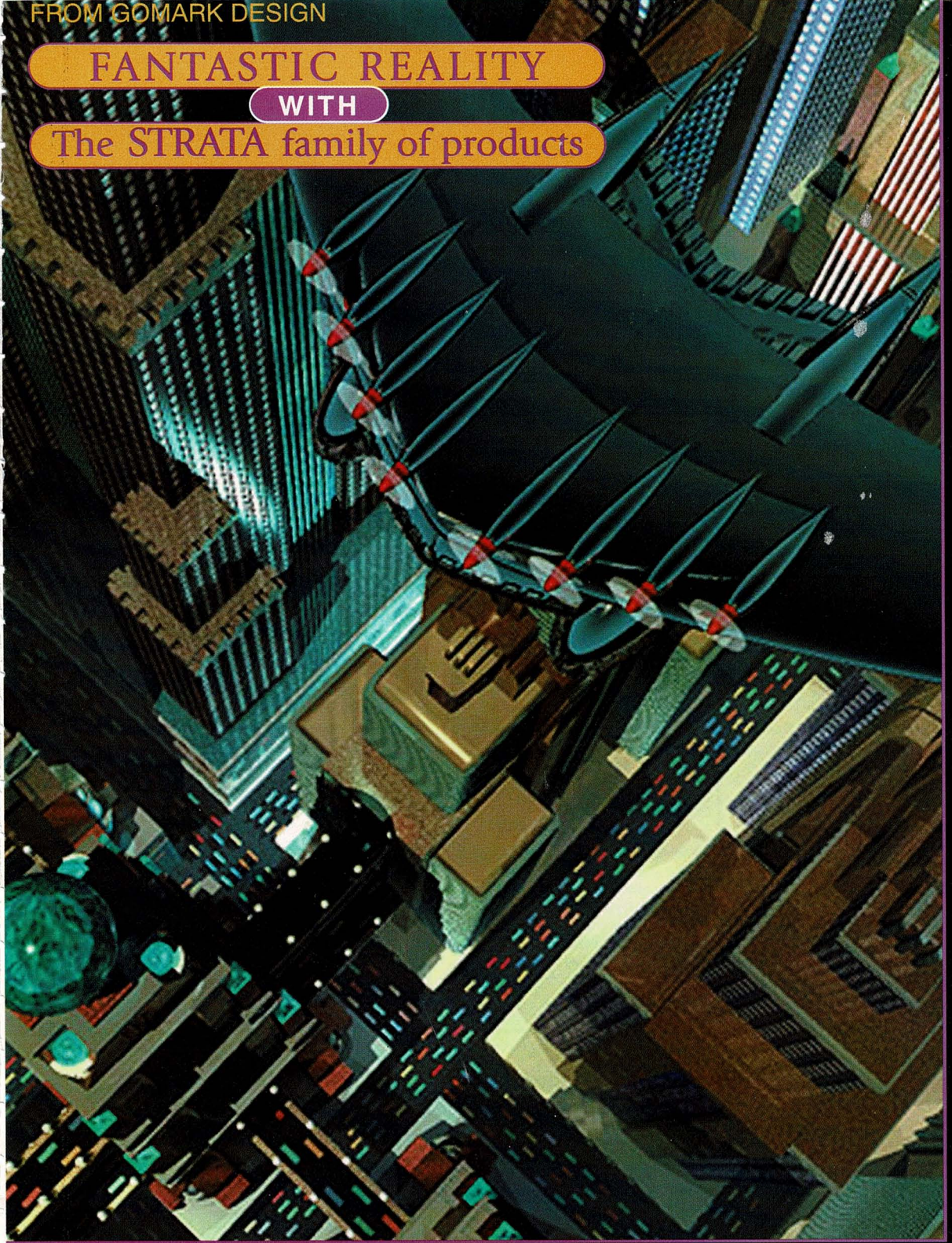

STRATA™ STUDIO *Pro*

StudioPro Blitz Supports:

QuickDraw 3D, which allows users to manipulate and move rendered objects directly within the application, rather than just as wireframe or bounding boxes.

QuickTime VR, which enables users to explore virtual spaces and examine 3D objects interactively. StudioPro Blitz automates QuickTime VR authoring and scene compositing steps.

VRML. Users can save models as VRML files, publish transparently across the Internet, and create links between 3D objects and other common media types on the World Wide Web.

3DMF, Apple's new standard 3D file format. Models saved in 3DMF format will be equally functional on a Power Mac, a PC running Windows, or a UNIX workstation.

Hardware accelerators (PCI) and multi-processor architecture.
Apple's multiprocessor created by Daystar makes it easy to implement and enhance the multitasking performance of StudioPro Blitz.

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Create it yourself

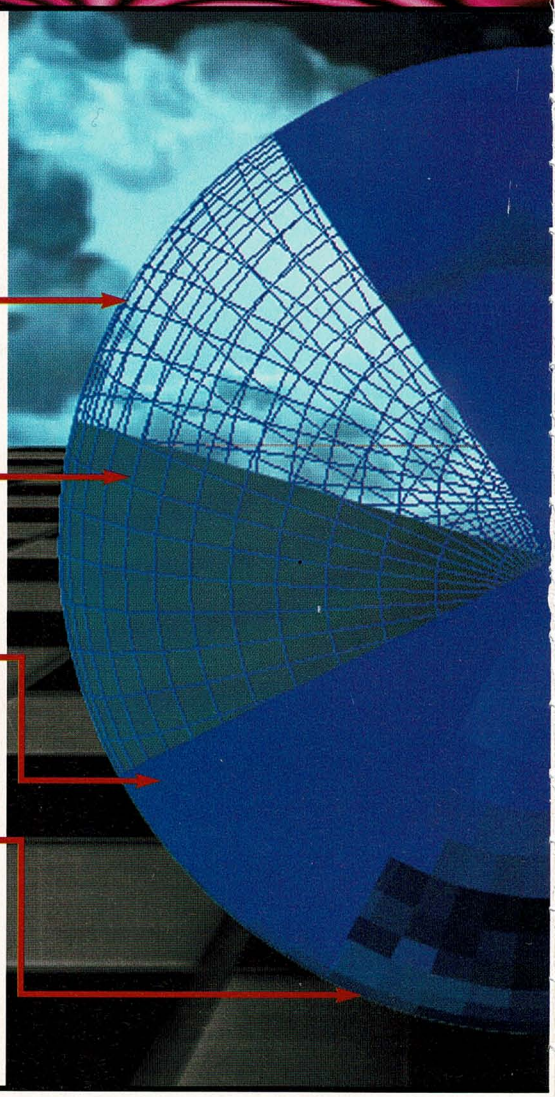
How do you get started in 3D? Josef Morrell is your guide to *Presenter Pro*, the complete 3D modelling/rendering package on our Cover CD this issue.

Whether it's a still-life of a vase of flowers, an off-world spacestation, or a complete virtual environment in which you can wander around, 3D on your Mac is all about fabulous images – images with that added dimension of realism. What's more, your Mac makes it all easy. It does all the complicated bits for you; all you have to do is tell it the shape of things and where they go.

Every 3D object on the Mac, no matter how rounded or complex, is constructed by fitting flat polygons (closed shapes, like triangles and squares) of varying shapes and sizes together. The more complex the shape, the more polygons needed to describe it, and the longer it will take to render (that is, add the surface texture and colour). When you're starting

Rendering

As you construct your model, you'll want to try preview renders from different angles to see how it's shaping up. And, of course, you will need to render the final image. Most 3D programs offer different rendering techniques (or 'algorithms'), each of which has its own particular properties.



Wireframe
So basic we're embarrassed to call it rendering. Wireframe rendering only shows outlines and basic colours in the scene, but you'll find it very useful for blocking out camera angles and doing preview animation.

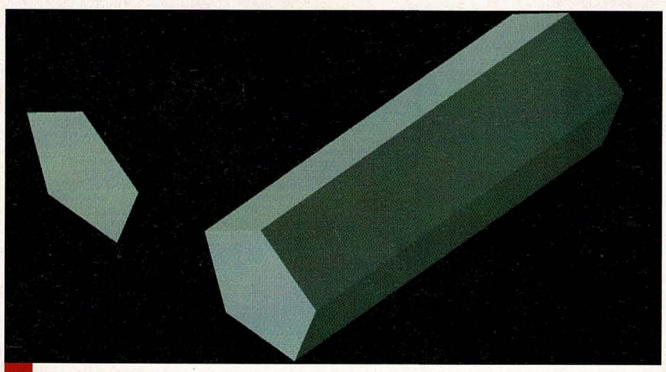
Hidden-line removal
Only marginally more advanced than wireframe, hidden-line rendering works out which parts of the model should be hidden from your viewpoint, giving you an 'outline view' of a solid object that doesn't appear confusingly transparent.

Quick shading
This produces solid looking objects, but you can still see how surfaces are made up of multi-faceted polygons. The quick shading algorithm shows rudimentary colours and illumination, and is as good as you will get in working views.

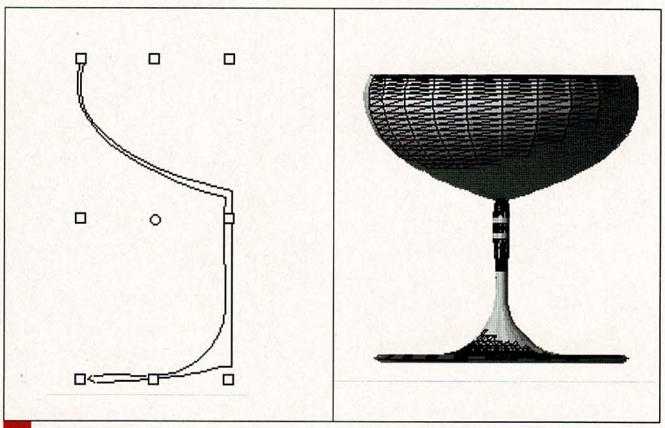
Flat or 'constant' shading
Similar to quick shading, but more detailed. The flat shading algorithm calculates one colour for each polygon in the model, based on the texture used and its position relative to light sources. The result gives a better indication of how the light sources in your model will affect the final render.

Build your own

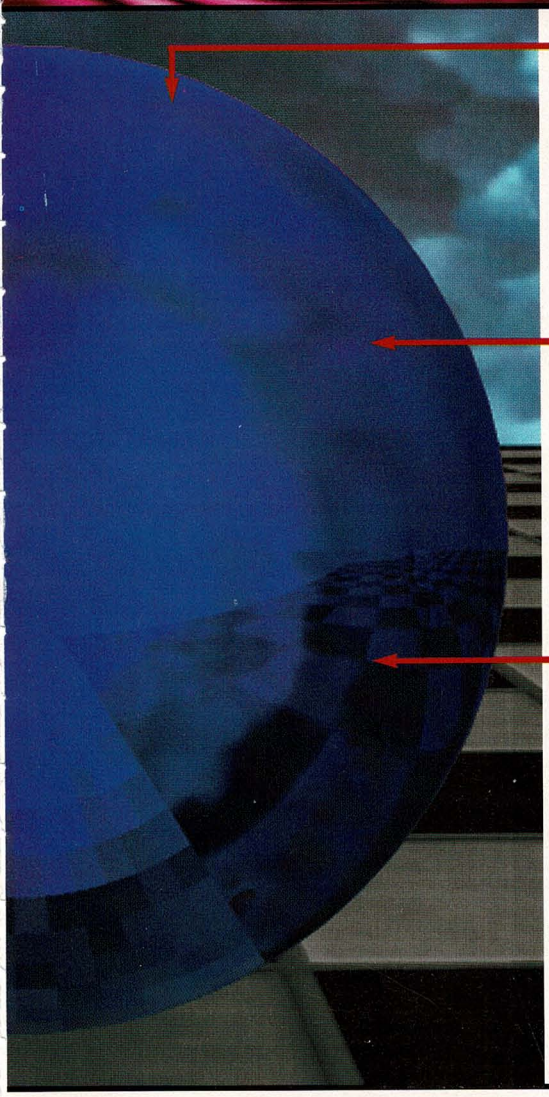
Apart from building up objects from 'primitives', there are several techniques you can use for making 3D shapes.



1 Extruding
Imagine a 2D shape drawn on a flat surface. Now imagine that its outline defines a hole, like a keyhole, and that you are pushing a malleable substance like Plasticine (™) through it. This is extrusion – the result is a 3D object with a cross-section shaped like the keyhole. The final shape you get depends on what 'extrusion profile' you use – that is, the shape of the 'keyhole'.



2 Lathing
The Lathe tool is slightly more complex. It produces a solid 3D object from a 2D profile by rotating it around an axis. Imagine a lump of clay rotating on a potter's wheel and you're on the right track. The Lathe tool is useful for creating cylindrical objects such as vases and pots.



Gouraud shading
This produces a much smoother appearance and better colour gradients than the simpler rendering algorithms, but it can't handle texture maps, transparency, or shadows. It works by averaging the amount of reflected light over adjacent polygons. The result is a smoothly shaded surface, which looks solid.

Phong shading
The first of the photorealistic rendering algorithms. Phong shading is a complex, power-hungry and therefore time-consuming algorithm, which, when used to maximum effect, makes 3D models look indistinguishable from the real thing. Where it falls down is in the transparency department, and most Phong-based algorithms can't produce shadows.

Raytracing
This produces the best images of all because it recreates what you'd see in the real world. When you look at an object, what you actually see is light being reflected off it. The raytracing algorithm tracks rays of light 'backwards' from the camera to the object, and then back to the original light source to calculate what should be reaching your eye. The bad news is that raytracing is extremely processor intensive – even simple models take ages to render – but the results are stunning.

out, therefore, it makes sense to keep your models simple.

While you're working on your 3D drawing (or 'model' in 3D-speak), objects are displayed as wireframe outlines – it would take too much time and processor power to render the surfaces. Working views rarely show perspective either – that's only needed when you're rendering previews or the final image. So it helps if you can visualise your object as a wireframe in isometric view.

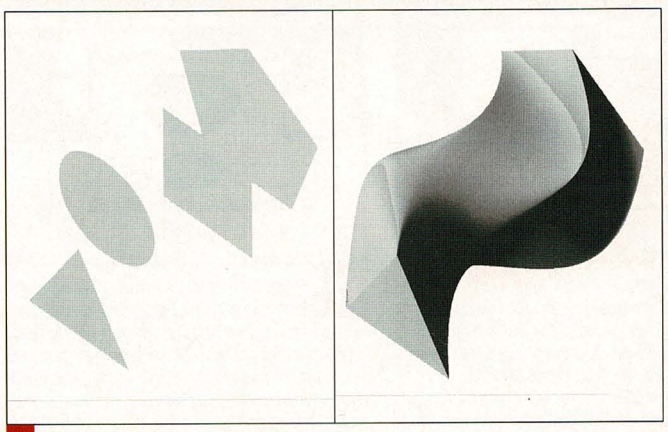
Alternatively, nearly all 3D modelling programs come with an assortment of ready-made shapes (often called 'primitives') such as cubes, spheres and cylinders, which you can use as 'building blocks' to construct your object. *Presenter Pro* makes these accessible through a pop-up menu in the Tool palette – just select one, then drag out a box in the window to define how large it should be.

After mucking about with these for a while, you might want to make your own shapes. There are three basic techniques you can use for doing this: extruding, lathing, and skinning – see the panel below. Each is available in *Presenter Pro's* Tool palette.

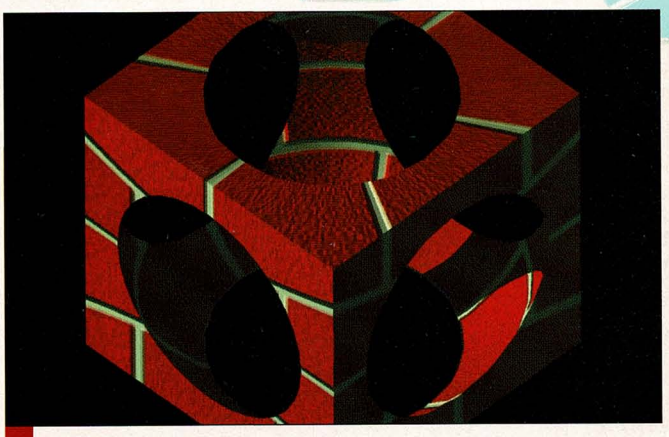
You don't need to model fine details, bumps or gradients on your model; you can fake them instead by applying a texture to the basic shape of an object. Texture mapping wraps patterns and textures onto a model, as if you were projecting a patterned light onto it. Applying a texture also enables you to define certain real-world properties such as transparency, reflection, and luminescence. A good texture map is worth 100 hours of modelling – and because they're only skin deep, texture maps render far more quickly than modelled detail.

X MARKS THE SPOT

Points on screen are defined using a conventional co-ordinate system, with the 'X' axis across the screen and the 'Y' axis down – so '120,80' defines a point 120 pixels across from the left and 80 pixels down from the top. In 3D, the third dimension, depth, is denoted by 'Z'.



3 Skinning
The Skin function is an incredibly useful tool for creating objects that don't have a symmetrical axis like those created by the Extrude and Lathe tools. In plain English, this means shapes that twist and turn, or change shape and size. It works by linking a series of 2D ribs together and stretching a skin over them. Imagine the ribs in a rowing boat, or a paper lampshade, and you have a good idea of how the Skin function works.



4 Other modelling functions
Most 3D programs have a host of other features you can use to create or edit specific 3D shapes. One of the more common features is a Boolean modeller. With this you take two shapes and use one to 'cut' a section out of the other, or combine them to produce a single shape. Another common feature is a 3D editor, with which you pull the individual vertices or points of a 3D object around to distort or deform its shape. This is useful for creating objects that are difficult to model, such as the petals of a flower.

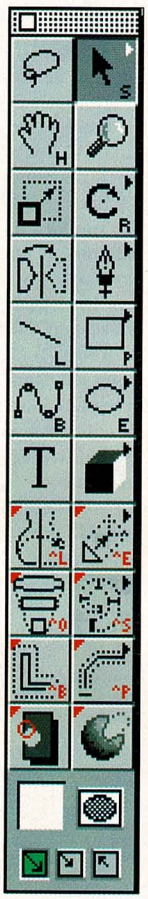
Continued on next page

GET STARTED WITH PRESENTER PRO

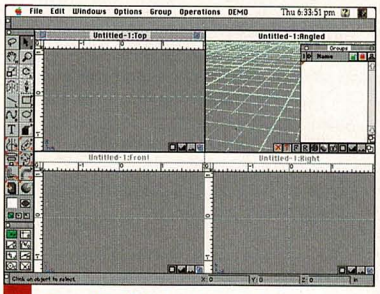
On the Cover CD you'll find *VIDI Presenter Pro*, a complete 3D modelling and rendering package. The package comprises two programs: *ModelPro*, for putting your 3D masterpiece together; and *PresenterPro*, for rendering and animating your final images. The package on the CD is limited only in that *ModelPro* can save files up to 100K in size, and *PresenterPro* can render images up to 320 x 240 pixels. If you need more than this, there's an enhanced version of the program. It usually costs over £2,000, but you can save 20% through MACFORMAT – see the coupon on page 57.

All 3D programs demand a lot of intensive calculations, especially for rendering. To run this program, or any other 3D package, you need a Mac equipped with an FPU or maths co-processor. If you have a PowerMac or a Quadra, the FPU is built into the main processor. Unfortunately, if you have an LC or Performa (except for the 5200, 5300 and 6200), your machine doesn't have an FPU unless you've added one as an upgrade. You will also need 8Mb of free RAM, and System 7 or later.

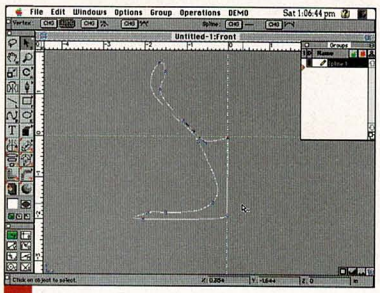
MODEL PRO'S TOOLS



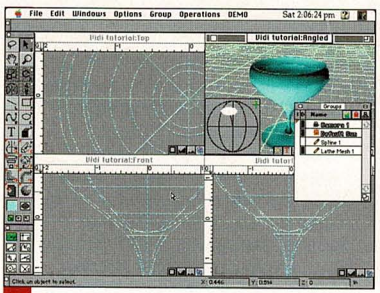
Selection	Edit
Scroll	Magnify
Resize	Rotate
Reflect	Pen
Line	Polygon
Spline	Round polygon
Text	Primitives
Lathe	Extrude
Loft (sometimes referred to as Skin)	Sweep
Bevel	Path extrude
Punch	Boolean
Colour palette	Background/ foreground



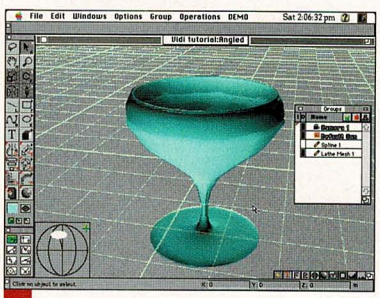
1 Open *ModelPro* by double-clicking on its icon. A new document opens, with four windows, representing top, angled, front, and right viewpoints. Click on the resize box of the front view window for more working space. We're going to model a champagne glass. We only need two of *ModelPro's* powerful modelling tools: the Spline tool to produce the basic profile, then the Lathe tool. Click on the Spline tool, then click and drag a few times in the main window, to see how the tool works. It's like the Bezier tool in 2D programs. Choose **Select All** from the **Edit** menu, then **Clear** to delete your practice splines.



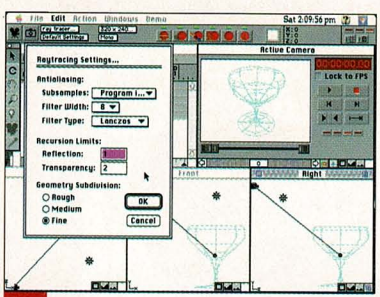
2 Using the Spline tool, draw half of a glass outline. Don't worry if it looks nothing like a glass – we'll tidy it up in a minute. When you come to the last point, click on the snap-to-vertice button in the Snap palette (below the Tool palette, second down on the left) and place your final point on top of your first. This will link these two points together so that you have a closed shape.



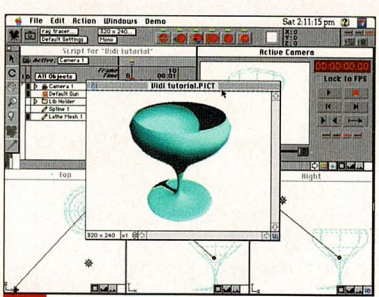
6 Click on the resize box on the front view window to reveal the other views. The angled view in the top right of the screen shows you what the glass looks like in 3D with perspective. To see a shaded view, click on the shaded sphere at the bottom of the window. You can change the viewpoint in this window by clicking and dragging the image.



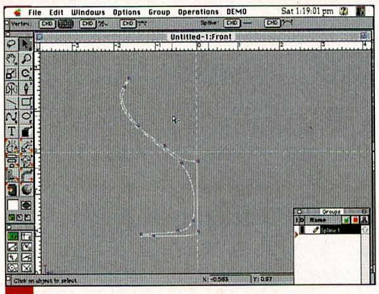
7 Finally, we're going to adjust the lighting a bit. To do this, make sure you're in shaded view, and click on the light icon below the angled view window. A small window pops up. The white disks in this window represent light sources. You can add new lights by clicking on the '+' button, or remove lights by clicking on the '–' button. To move lights around, simply click and drag one of the disks. When you've finished, save your work and quit *ModelPro*.



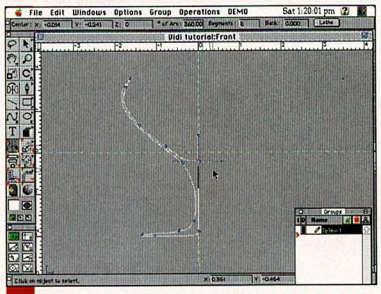
11 Now to render a preview of our glass. Click in the pop-up menu in the top left corner of the screen, next to the camera button, and select **Ray tracer.** A window will appear with the raytracer settings. You can experiment with the options here later, but for the moment, select **Fine** under **Geometry Subdivision.** This sets the 'quality' of the final render – the better the render, the longer it will take. Click OK to close this box. To start the render, click on the camera button in the top left of the screen. The program will start to render your model. How long it takes depends on the power of your Mac, but in most cases it will only be a few minutes.



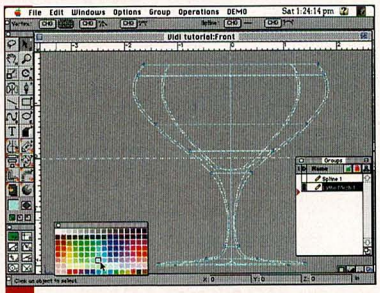
12 Your rendered champagne glass appears! Now, glasses are usually transparent, but this requires a special 'transparent' texture, which this version of *Presenter Pro* doesn't provide. You can however use the versatile **Export...** feature in *ModelPro* to save your model file out in a format supported by one of the other 3D program demos on the Cover CD – try saving a model in DXF format and opening it in *StrataStudio Pro.* The *StrataStudio* demo cannot save a final rendered image, but you can view it on screen and 18 textures are provided, including 'glass'.



3 To tidy up the profile, select the Pointer tool (top right of the Tool palette) and drag the vertice points of the spline around until you are happy with their position. To change the curvature of the spline, use the vertex's control handles. You should end up with something looking like this.



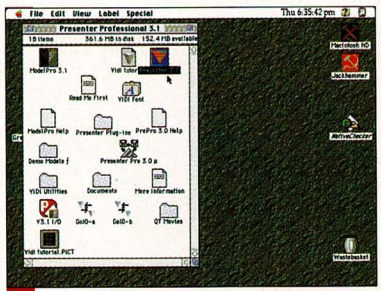
4 Now you're ready to make a true 3D object. Click on the Lathe tool (eighth down on the left of the Tool palette) and click in the main screen to the right of the profile. Drag the crosshairs to line up with the right edge of your profile. When you're happy, double-click the centre of the crosshairs.



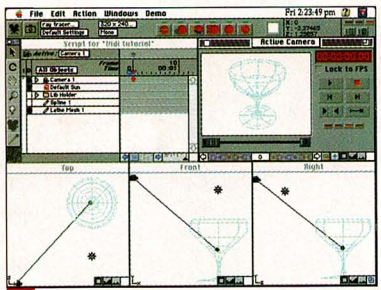
5 Hey presto! A champagne glass! A white outline is a bit dull, so for the moment we'll apply a simple colour to make it more attractive. To do this, click in the foreground colour box (the white square at the bottom of the Tool palette) and a pop-up Colour palette appears. You can make it any colour you want, but we're using a light blue to roughly resemble glass.

IT'S ON THE CD!

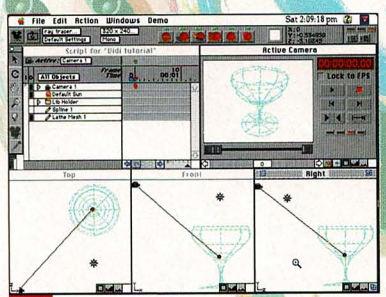
For details of the more advanced tools that *Presenter Pro* offers, have a look at the tutorials included on the Cover CD. The program is capable of creating very impressive objects – so when you've got the hang of it, send us your masterpieces for the Readers' Gallery section of our Cover CD. The address is: The 3D Zone, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.



8 Now to render your image. The modelling and rendering parts of the *Presenter Pro* package are in separate programs. This has the advantage that both programs need much less memory than an all-in-one package. To render your model, double-click on the *PresenterPro* application icon to launch it, then use the normal **Open** command to open your saved *ModelPro* file.



9 In *PresenterPro*, once again, you have four view windows: active camera, top, front, and right. There is also a fifth window that lists each object used to make the model, and a script for animation, which we'll leave aside for the moment. If you fancy trying your hand at a bit of animation, there are some tutorials on the Cover CD inside the PresenterPro folder.



10 *PresenterPro's* default camera position is 45 degrees from each plane – that is, the standard isometric viewpoint. If you want to change this, move the camera by clicking and dragging it. If you want to change the camera's focal point (where it's pointing) click and drag the red dot. The camera view in the top right corner changes as you move the camera, so it's easy to get the position just right.

Exclusive VIDI Presenter Pro special offer
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Now you've sampled the power of *VIDI Presenter Professional*, you might get a bit more ambitious and find that the 100K limit is a little restrictive. Though you can always create a complex model in parts, each of which is within this limit, and render a larger image than 320 x 240 by doing it in sections, there is a simpler way to get around these limitations. The enhanced version *(Presenter Pro* professional, you might call it) gives you all the same features as the version on the Cover CD, but with no limitations – apart from your Mac's own capacity. MACFORMAT and MGA, the UK distributors of *Presenter Pro,* have put together a special offer just for you.

***VIDI Presenter Pro* is a full-scale professional package and has a professional-level price to match. It would normally cost you £2,173.75 (£1,850 plus VAT); but MGA are offering 20% off to MACFORMAT readers, making the price £1,739 (£1,480 plus VAT) – a total saving of almost £435.**

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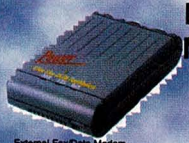

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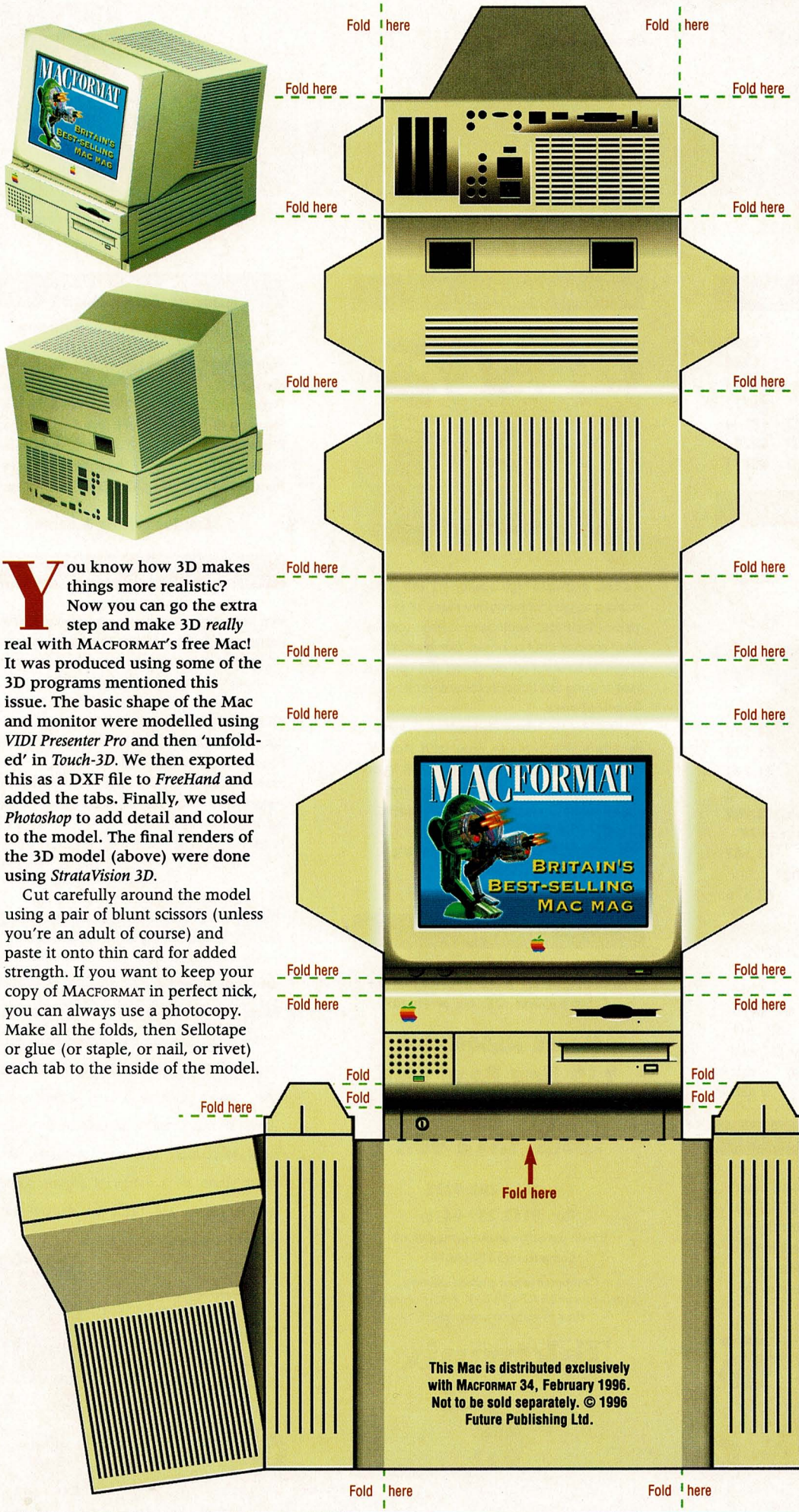
You know how 3D makes things more realistic? Now you can go the extra step and make 3D *really* real with MACFORMAT's free Mac! It was produced using some of the 3D programs mentioned this issue. The basic shape of the Mac and monitor were modelled using *VIDI Presenter Pro* and then 'unfolded' in *Touch-3D*. We then exported this as a DXF file to *FreeHand* and added the tabs. Finally, we used *Photoshop* to add detail and colour to the model. The final renders of the 3D model (above) were done using *StrataVision 3D*.

Cut carefully around the model using a pair of blunt scissors (unless you're an adult of course) and paste it onto thin card for added strength. If you want to keep your copy of MACFORMAT in perfect nick, you can always use a photocopy. Make all the folds, then Sellotape or glue (or staple, or nail, or rivet) each tab to the inside of the model.


Fold here
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Store Wars

Today's hard drives, optical drives and removable drives offer huge amounts of storage, plus improved reliability and speed. Lindsay Bruce rounds them up.

At some point or another, you will probably find that you need more storage space than your Mac's humble hard disk can provide. This is especially true if you use your Mac for producing graphics or professional desktop publishing, but even if you're a home user you'll find after a few years that your storage space is at a premium.

There are short term solutions, of course. Compression programs such as *StuffIt* and *Compact Pro* can reduce the amount of space your files take up by as much as 50%, but, of course, to open them again you need to decompress them first – which takes up space and wastes time.

Another good reason for buying an external drive is to back up your Mac's internal hard disk. Hard disks, because of the way they're made and the speeds at which they operate, have a life expectancy somewhat shorter than your Mac's. Your internal hard disk may last five or ten years – maybe even longer – but it will eventually die, and this is not negotiable. Keeping a regular backup on a second drive will safeguard your files should this happen.

But which type of storage device should you go for? Hard drives aren't the only type of storage available – modern technologies like magneto-optical drives offer excellent reliability and enormous capacity, or you might choose to go for a drive offering removable media, which you can take out and slip into your pocket for easy portability. Over the next five pages we take a look at storage options for your Mac, how much they cost and which one's right for you.

Continued on next page

WIN AN OPTICAL!

Fancy a 1.3Gb magneto-optical drive? Yes, we thought you might, which is why we're giving away no less than three ONE Technologies drives, courtesy of Disc Direct! For more details, turn to page 138.

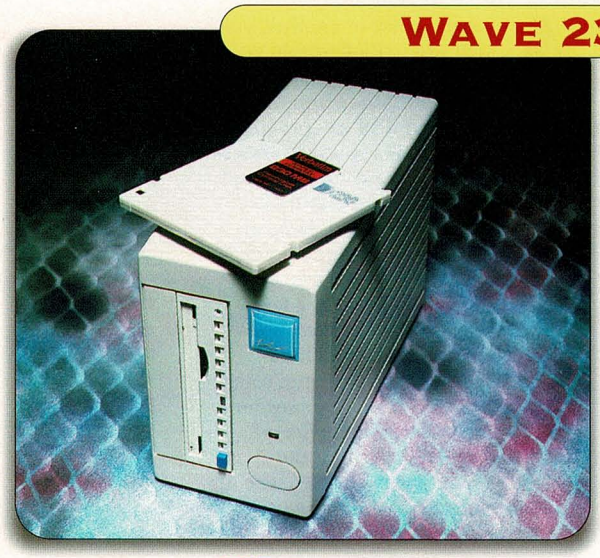
WHICH DRIVE IS RIGHT FOR YOU?

If you want to buy more storage, then you should think carefully about how you are going to use it and what you want to be able to do with it. If you need to move files between Macs, or store text and small graphics, then one of the smaller removables, such as the Iomega Zip Drive or the SyQuest EZ135, should fit the bill admirably. If you use large databases or graphics libraries which you need to change on a regular basis, then a 230Mb optical drive is a more secure bet. And if you need to back up, archive, or just move really huge files around, then a 1.3Gb optical drive is a good investment.

If, however, you're looking to install more software on your Mac and run more applications, then there is absolutely no substitute for a hard disk. Only a fixed hard disk will provide you with the essential balance of speed and capacity that your Macintosh demands from its main drive. Take a look at the next five pages for a round-up of the latest drives available in each field.

Opticals

WAVE 230MB MAGNETO-OPTICAL



Wave's 230Mb drive is a solid performer that reads and writes to 128Mb and 230Mb 3.5-inch disks. A compact unit in a neat looking case, the drive is reasonably quiet in operation, and small enough not to be an intrusion, however small your desk is.

But size isn't everything, and a little more thought could have gone into the design. The drive sits upright with the slot vertical, which means that pushing a disk in entails the risk of jamming your fingers in the slot. Another irritation is that the SCSI cable is too short, so the only place you can park the drive is next to your Mac.

The documentation with the drive is sparse, to say the least, with only a four-page manual, containing no troubleshooting section or even technical support details.

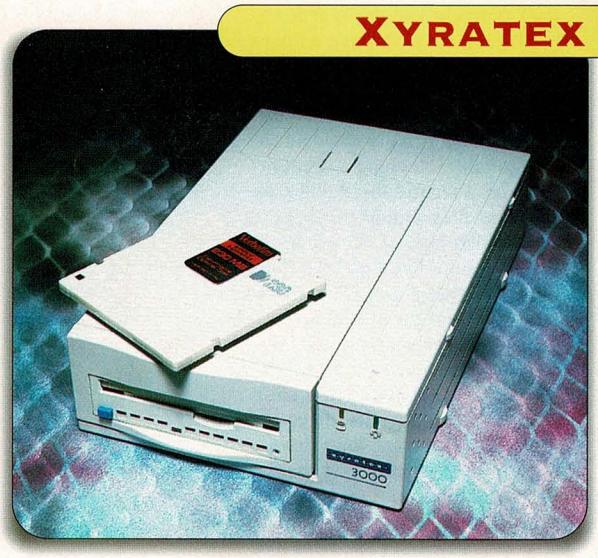
The good news is that the drive comes with *FormatterOne Pro* software for mounting and formatting optical disks. The driver is 'smart' and works out which SCSI identity your optical is set to every time you start up, so if you need to change it over, you don't need to reinstall the driver. However, like the drive itself, little documentation is provided for this software.

WAVE 230MB DRIVE

For: compact and quiet, with good driver software, *FormatterOne Pro.*
Against: short SCSI cable, minimal documentation.
Price: £444.15 with one disk, £491.15 with five disks, plus £8 delivery. **Disks:** 230Mb – £17.63, 128Mb – £12.93
Contact: Computer Capability on 01392 364253

MACFORMAT RATING **74%**

XYRATEX 230MB MAGNETO-OPTICAL



The Xyratex is *really* fast for an optical. In fact, in the stakes for fastest optical on test, it comes first, with the TekOptic coming a close second, and, although it's nowhere near as quick as the average hard drive, you could easily forget this is an optical at all.

The Xyratex comes with a generous two-foot SCSI cable, *Spot-On* utilities, preformatted 230Mb disk, a detailed manual, and – wait for it – free lifetime technical support. Like the Wave optical, this is a 3.5-inch device, which takes 128Mb and 230Mb disks. It's housed in an uninspiring flat grey case with three lights – one for power, one for disk access, and one red one that's a complete mystery and always seems to be on. In operation, it's incredibly quiet – hardly audible above the noise of your Mac. The documentation is excellent and covers setting up, troubleshooting, and maintenance. And – with impressive forethought – a pin is supplied for manually ejecting the disk should the power fail. Overall, this is an excellent drive which only suffers from an aesthetically unappealing case and being more expensive than the Wave drive.

MACFORMAT Classic

XYRATEX 230MB

For: fast, quiet, cheap, good documentation.
Against: it's flat, it's grey, it has lights.
Price: £506.43 **Disks:** 230Mb – £17.63, 128Mb – £12.93.
Contact: Xyratex on 01705 498851.

MACFORMAT RATING **90%**

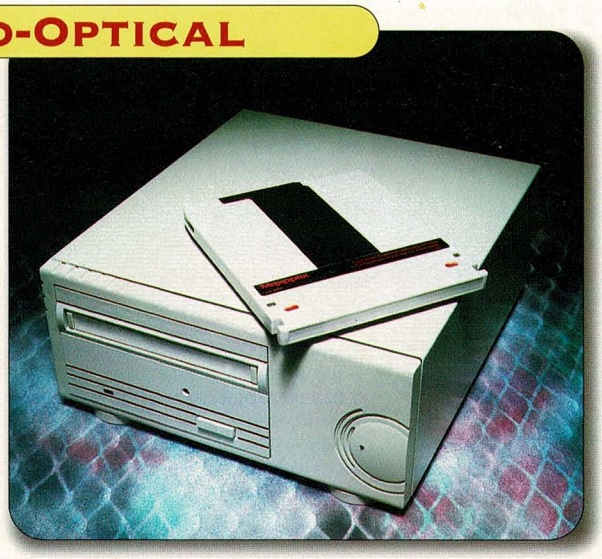
TEKOPTIC 1.3GB MAGNETO-OPTICAL

Monster sized, the TekOptic 1.3Gb magneto-optical drive takes 5.25-inch, 1.3Gb disks – that's the equivalent of two full CD-ROMs! The TekOptic drive is also fast for a 1.3Gb optical, helped along by its 4Mb buffer cache – a dedicated area of memory, used to store data before it is written to the disk and as it's being read from the disk. This speeds up the transfer of data between your Mac and the drive considerably, especially if you are working with particularly large files.

The TekOptic is aimed at the professional user who needs to store serious amounts of data on a virtually indestructible but fast and rewritable format. TekWare also offer the same drive with a 1Mb cache, which, while not as fast, is certainly cheaper.

The casing is stylish and well designed, but it's also rather large and heavy, taking up a fair bit of your desk real-estate. The documentation that comes with the drive is technically detailed, but lacks a troubleshooting section or even a manual for the driver software. The TekOptic does have a noisy fan, and as with most large opticals, you can hear a distinct pinging noise as the drive writes to the disk, but in an office environment you don't notice this too much.

In use, the drive is a dream. It's fast, reliable, and stores more files than you can poke a stick at. It also supports auto-eject, so when you drag a disk icon to the Wastebasket the drive kindly ejects the disk for you. The drive is supplied with MacPeek's *SuperSpot* software, an excellent driver and formatting package that will mount anything short of a dead camel on your Desktop. Make sure you ask for a SCSI cable to connect it to your Mac.



TEKOPTIC 1.3GB

For: a fast drive with excellent driver and formatting software.
Against: documentation is on the thin side.
Price: 4Mb cache – £1,874.13, 1Mb cache – £1,756.63, plus £12 delivery. **Disks:** £52.88.
Contact: TekWare on 01384 392121.

MACFORMAT RATING 81%

ONE TECH 1.3GB MAGNETO-OPTICAL

Like the TekOptic drive, this is a 5.25-inch device with a similar sized footprint but only half the height. Although not quite as fast as the TekWare, the ONE drive is no slouch, and is much quieter in operation than its counterpart. Our test drive came from Denmark, so the mains cable supplied was of the European two-pin variety and all of the promotional bumph was in Danish, but ONE now have a UK distributor and assure us that the appropriate mains cable will be supplied for use over here.

On the plus side, the documentation supplied is superb, with detailed instructions and illustrations showing how to set it up and connect it to your Mac, and a troubleshooting section for if it all goes wrong. The disk supplied with the drive is even preformatted for use with your Mac.

FormatterOne Pro is supplied as a driver and formatting program, and comes on its own floppy disk with a detailed (and comprehensible) section in the manual telling you how to use it. In operation, the ONE drive works smoothly, with very large graphics files copying quickly to an almost unlimited source of storage. Our Art Editor loved it so much that when we had to send it back, it took four of us to hold him down. It's difficult to fault this drive – it's fast, stores loads of files, and is comparatively cheap. You really can't go wrong with it – the only minor flaw in its character is the rather boxy looking case which doesn't do justice to the drive inside.

ONE TECH 1.3GB

For: good, fast optical, good formatting software, excellent documentation, and comparatively cheap to boot.
Against: case could do with a makeover.
Price: 1Mb cache – £822, 4Mb cache – £939, plus £8.50 P&P. **Disks:** £52.88.
Contact: MacTrix on 01372 723723.

MACFORMAT RATING 95%

HOW MAGNETO-OPTICAL DRIVES WORK

An optical drive is like a cross between a CD-ROM and a floppy disk, but much faster. The disk even looks a bit like a CD in a large floppy case. The drive works by using a laser to heat up a tiny part of the disk to almost 1,000°C. A magnetic read/write head then passes over that part and polarises it to either a one or a zero. The beauty of it is that once the disk has cooled, the data can't be corrupted by stray magnetic interference, which makes magneto-optical disks extremely stable – some manufacturers claim a lifetime of 50 years or more. Even better, like floppy disks, the disks are rewritable, so you can use them time and time again.

Optical drives come in two sizes: 3.5-inch and 5.25-inch. 3.5-inch drives can read and write 128Mb and 230Mb optical disks, while 5.25-inch drives can read and write 650Mb and 1.3Gb disks. The 'size' of the drive is not its physical size, but rather the size of the disk it stores data on. This applies not only to optical drives, but all storage devices. A floppy disk, for example, is a 3.5-inch disk, whereas a CD-ROM is a 5.25-inch disk.

FOOTPRINT?

Why are we talking about footprints? The footprint of a hard drive, or indeed any hardware, is the amount of space it physically takes up on your desktop.

Continued on next page

Hard drives

SCSI WHO?
SCSI (pronounced 'scuzzy') stands for Small Computer Systems Interface and is the connection protocol the Mac uses for all storage devices and some input devices (such as scanners).

ONE GIGABYTE? BUT THAT'S TOO MUCH!

All of the hard disks on review this issue are one gigabyte drives – that's 1,024 megabytes! There are two reasons for this. The first is that because of the way hard disks are constructed, 1Gb drives happen to fall on a performance threshold, and are, generally speaking, faster than their smaller counterparts. The second, and better, reason is that it simply isn't worth buying a hard disk smaller than 1Gb these days. Given that they only cost around £60 more than a 500Mb drive, you're better off spending the extra money and getting the bigger drive. A 1Gb hard disk is a good investment, as it will enable you to store plenty of files and is insurance against the ever-increasing size of the common Macintosh programs – and that's including the Operating System. Most larger hard disks also come with a longer guaranteed life span – as much as five years, in some cases.

GASTEINER 1GB HARD DRIVE

The Gasteiner drive is the fastest drive we tested, as well as being one of the cheapest. Its only fault is an excessively powerful fan, which sucks all the air out of the room and no doubt gives the neighbours the impression that you're testing rockets in your bedroom.

In all other respects, this drive is an absolute dream to work with. Copying files of 10Mb or more is effortless and fast. Slap a System Folder on it and make it your startup disk, and your Mac will start up much quicker.

Gasteiner's drive is remarkably compact, taking up less desk space than a CD case lying flat – although, if you have more than one external, stacking them could be tricky. The SCSI cable is a decent length, but could do with more robust connectors.

MacPeek's *Spot-On* driver and formatting utility is supplied with the drive and comes with a host of caching options that will make it go even faster. The documentation is nearly non-existent, but *Spot-On's* manual covers all you could possibly need to know about hard disks anyway.

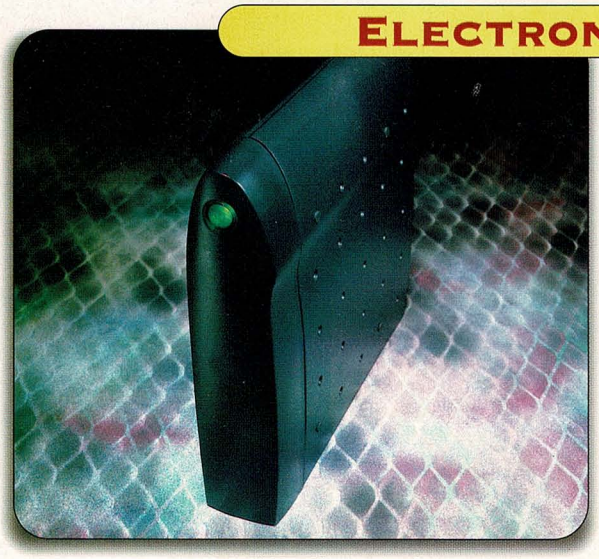
MACFORMAT Classic

GASTEINER 1GB

For: cheap and wickedly fast.
Against: noisier than Hurricane Zelda, and some documentation would be nice.
Price: £292.58.
Contact: Gasteiner Technologies on 0181 345 6000.

MACFORMAT RATING **90%**

ELECTRONIQUE D2 1GB HARD DRIVE



Although not the fastest or cheapest drive on review, the D2 is certainly the most stylish. Housed in a black curvy case that can stand upright or lie flat, the D2 is a definite departure from the boring, square, grey, plastic boxes most external devices come in. A chunky green luminous on/off switch on the front of the drive ensures you won't lose it in the dark, but the temptation for your kids to play with this could be a drawback.

The Electronique comes with the near-obligatory *Spot-On* formatting software, manual, connections, leads, terminator, and a stand – should you want to perch it upright. The SCSI cable, although good quality, is less than a foot long and only just enables you to sit the drive next to your Mac. When switched on, the drive is reasonably quiet and quick, but for this money it could be faster.

It uses an AV (Audio-Visual) mechanism, which means you are virtually guaranteed an uninterrupted flow of data. This is absolutely critical for mastering CD-ROMs and recording sound or video. The rather sparse documentation covers all of D2's drives – and in several languages – but is one of the few manuals that contain some decent illustrations.

ELECTRONIQUE D2 1GB

For: interesting shape, fast.
Against: slightly more expensive than the Gasteiner, short SCSI cable.
Price: around £310.
Contact: Electronique D2 on 0171 833 0009.

MACFORMAT RATING **84%**

QUANTUM FIREBALL 1GB HARD DRIVE

As drive cases go, this one isn't particularly awe inspiring. However, beauty is only skin (or plastic) deep, and the Quantum Fireball hard drive does perform extremely well. The SCSI cable is notable for its generosity, enabling you to place the drive where it's convenient for you, rather than having it jammed right up against the side of your Mac.

For a change, the driver and formatting software is *Drive7* from Casa Blanca Works, and, like the others, provides you with plenty of caching options. The manual for the software is well written and helpful, which is just as well because you don't get one with the drive.

Once powered up, the Quantum Fireball is the quietest of all the drives on test – after a couple of minutes you forget it even exists. Copying files from one disk to another is fast, and opening files even faster.

The low profile case may not take your breath away, but, more importantly, it does enable you to stack other drives on top of it, or even hide it away under your desk. As usual, the drive is supplied with a SCSI cable, terminator and power cable.

QUANTUM FIREBALL 1GB

For: fast, quiet, decent SCSI cable, cheap.
Against: plain case, no manual.
Price: £233.83.
Contact: Performance Direct on 01784 477477.

MACFORMAT RATING **88%**

Removables

TELL ME MORE ABOUT REMOVABLES

Removable drives have the distinct advantage of providing almost unlimited storage at an affordable price, and of course the disks are portable. The drawback is that removable drives are usually slow in comparison with fixed hard disks. However, if you do need to move large files between Macs, then the removable has to be your first choice.

A magneto-optical drive is technically also a removable drive, but we've listed them separately because they use different (more expensive) technology from most removable drives.

We've also taken the liberty of doing a head-to-head comparison of the newest removables: the SyQuest EZ135 and the Iomega Zip Drive. Other removables which have been around longer and are better established, such as the Bernoulli drive, are still available and you should take at look at these as well.

SCSI IDENTITY

Nearly all drives give you the option of changing their SCSI identity number via a switch on the back of the case. SCSI ID conflicts can cause all sorts of problems. You can connect up to six external SCSI drives.

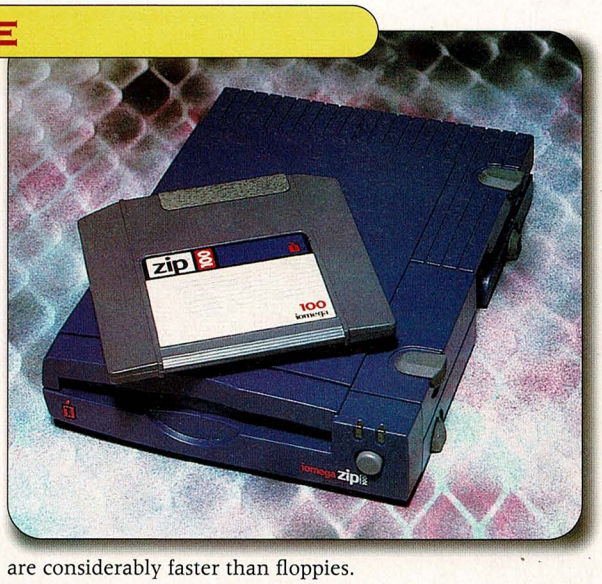
IOMEGA ZIP DRIVE

Okay, so we reviewed the Zip Drive back in issue 29 – but we're showing it again because since then SyQuest have released the EZ135, which is in direct competition with the Zip Drive.

MACFORMAT Classic

The Zip Drive differs from conventional external drives in several ways. The first is that it doesn't have an internal power supply – that's provided by one of those clever transformers that doubles as a plug. Second, the Zip drive doesn't use 50-pin SCSI connectors like other drives; it uses the same 25-pin connector as the one on the back of your Mac. This isn't a problem, though – a suitable cable is supplied with the drive. Third, it lacks a couple of features, such as a power-on button, and the SCSI identity switch only enables you to select numbers 5 or 6.

That's the down side, so what has the Zip Drive got to offer? Well, loads of very cheap removable storage, for starters. The Zip takes 100Mb removable disks, which are the same size as a floppy (3.5-inch), but slightly thicker. The Zip Drive comes with two of these removable disks, one of which is blank, while the other contains utility and driver software. The disks themselves cost as little as £17.63, and they are considerably faster than floppies. The documentation supplied with the drive is a dream, with step by step instructions on setup, troubleshooting, and maintenance.



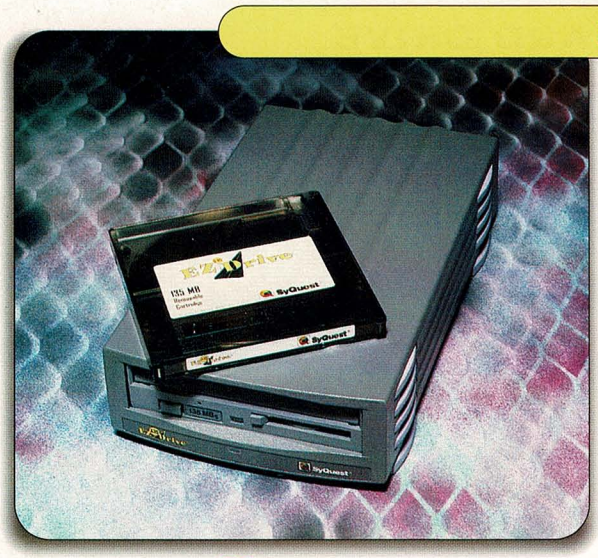
IOMEGA ZIP DRIVE

For: plenty of cheap storage, easy to set up.
Against: lack of a power-on button is a pain.
Price: £184.50 **Disks:** £17.63
Contact: Iomega on 0800 973194.

MACFORMAT RATING **91%**

Continued on next page

SyQuest EZ135



The SyQuest EZ135 is in the same class as, and rival to, the Iomega Zip Drive. Although the SyQuest EZ135 uses slightly different technology, the principle is the same. Both use 3.5-inch removable cartridges to store huge amounts of data, but, before you ask, no you can't use Zip disks in the EZ135, or vice versa.

Like the Zip, the EZ135 uses an external power supply, but while the Zip's is a neat plug type, the EZ135's power supply is a bulky thing that sits next to the drive. The actual drive is neat and well designed, although we weren't too sure about the purple trim. The EZ135 also uses the standard 50-pin SCSI connections, enables you to use any SCSI identity from 1 to 6, and has a power-on switch. The only minor irritation is that the disk doesn't auto-eject when you shut your Mac down – you have to eject manually.

In terms of performance, the EZ135 leaves the Zip Drive standing. First, it can store 135Mb of files per disk, compared to the Zip's 100Mb. Second, the EZ135 *really* shifts. In our performance tests it thrashed all of the other removables, and gave some of the hard disks a nasty shock.

However, far and away the most annoying thing about the EZ135 is its manual. It reads well enough, and is genuinely useful, but it's all been put together so carelessly that it hasn't even been printed properly. When you fork out £210 for a drive, you can at least expect to get a decently printed manual, not a photocopy with a couple of staples through it. Nevertheless, given the SyQuest EZ135's undeniably impressive speed and capacity, this is a forgivable sin.

MACFORMAT Classic

SyQuest EZ135

For: fast, loads of storage, cheap, easy to set up.
Against: needs a manual that doesn't disintegrate so easily.
Price: £210.33. **Disks:** £15.16.
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MACFORMAT RATING **94%**

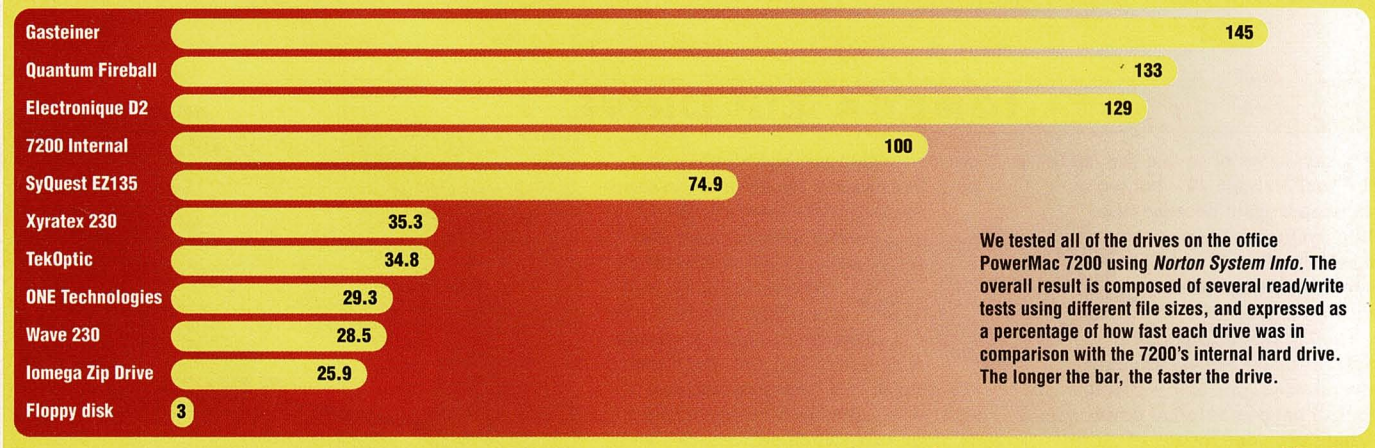
†Cost per Mb

In the table below, two figures are given for the cost per Mb of removables. The first is the cost per Mb you pay when you first buy the drive with one cartridge, and the second is the price you pay per Mb for additional cartridges.

A Quick Word on OEMs

Flip through the pages of MACFORMAT and you'll see dozens of companies selling drives of one make or another. The confusing thing is that very few manufacturers actually make drives – Quantum, Seagate, Connor, Fujitsu, and IBM are among them. These are dubbed OEMs (Original Equipment Manufacturers). The picture on the right is of the guts of a hard disk – this one is made by Fujitsu. Most companies merely put the hard disk unit inside a case with a power supply and sell it on with connection cables and driver software. Few companies actually make drives because they have to be built in ultra-clean rooms – an expensive process to set up.

Storage: The League Tables



We tested all of the drives on the office PowerMac 7200 using *Norton System Info*. The overall result is composed of several read/write tests using different file sizes, and expressed as a percentage of how fast each drive was in comparison with the 7200's internal hard drive. The longer the bar, the faster the drive.

Drive	Type	Capacity	Price (£)	Cost per Mb (£)†	Comments	MF rating
Wave 230	Optical	230Mb per disk	444 / 491	1.93 / 2.13 + 0.08	A good drive, but it could be faster.	74%
Xyratex 230	Optical	230Mb per disk	506	2.20 + 0.08	A very fast optical, but a little expensive.	90%
TekOptic	Optical	1.3Gb per disk	1,756 (1Mb) / 1,874 (4Mb)	1.32 / 1.41 + 0.04	Large and fast, but not cheap.	81%
ONE Technologies	Optical	1.3Gb per disk	822 (1Mb) / 939 (4Mb)	0.62 / 0.71 + 0.04	An excellent drive with a decent price tag.	95%
Gasteiner	Hard disk	1Gb	293	0.29	Fast and cheap, but noisy.	90%
Electronique D2	Hard disk	1Gb	310	0.30	Nice case, but the SCSI cable is too short.	84%
Quantum Fireball	Hard disk	1Gb	234	0.23	An excellent drive, but no documentation.	88%
Iomega Zip Drive	Removable	100Mb per disk	185	1.85 + 0.17	Cheap mass storage, but a little slow.	91%
SyQuest EZ135	Removable	135Mb per disk	210	1.56 + 0.11	Very quick indeed. An outstanding drive.	94%

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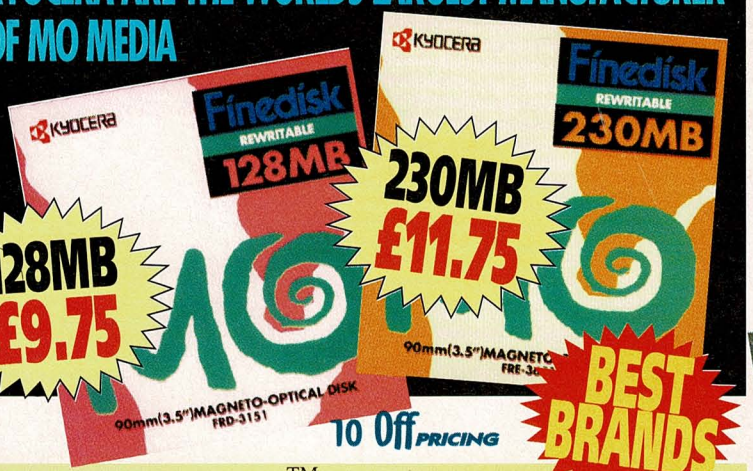

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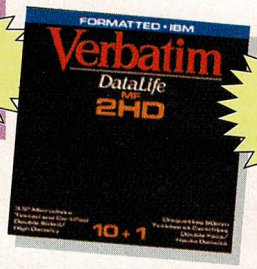

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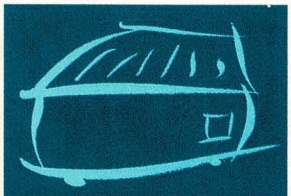

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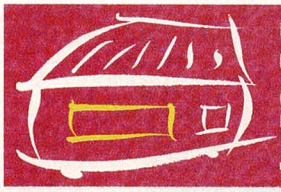

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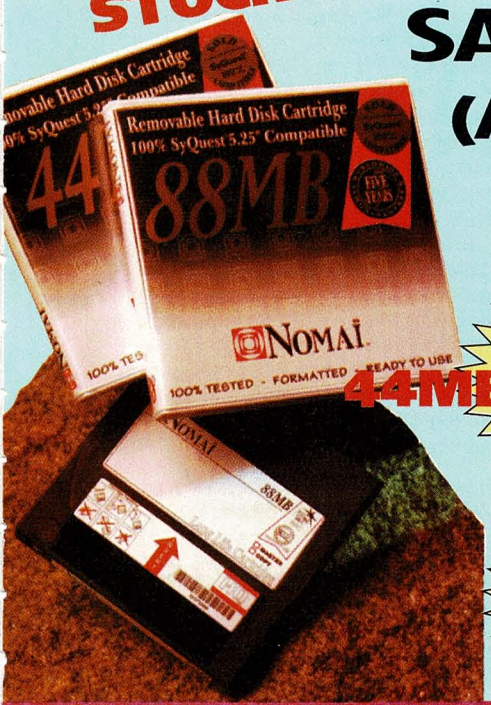

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An alien language

Ever been sent a text file you can't open, or a disk you can't read? Rod Lawton clears the mist, in the first of a two part series on foreign file formats.

On the Mac alone there are a dozen word processors in common use, each producing its own file format. But if you receive files from owners of other machines, your problems are multiplied. Not only do you have to struggle with the different file formats, you even have to work out how to get the file onto your Mac.

Here, then, is the MACFORMAT survival guide to text files. This issue we're covering how to get the file onto your Mac and how to read it. Once you've opened the file, you'll probably be presented with a load of gobbledygook, so next issue we'll look at how to translate the gibberish into English.

Getting it onto your Mac

There are two ways of getting files onto your Mac. The easiest, and most old-fashioned, is via the good old floppy. Thanks to the ubiquity of the 3.5-inch floppy disk you can swap files across a surprising range of machines. The second option is to transfer files either by modem or by serial cable – although with a serial cable you obviously need both machines in the same room. Which option you choose depends on the machine the file is coming from – disk transfer is much easier. Here are the main formats you may have to deal with.

- **Atari ST:** although the Atari ST uses its own proprietary disk formatting system, it's similar to the 720K DOS format – so similar, in fact, that STs can read from and write to DOS disks. There are ST utilities that make it possible to format a 720K DOS disk on an ST, but if this isn't possible you can send the owner a DOS disk yourself, by formatting it on your Mac using either *Apple File Exchange* or PC Exchange (see the panel on page 71).

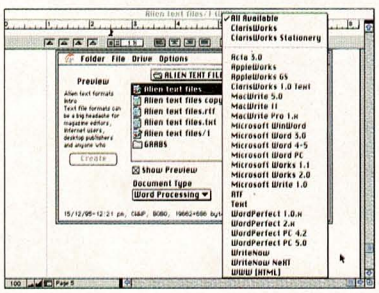
  Don't worry if PC Exchange only offers 1.4Mb formatting options when you put a floppy in. It's doing this because you've inserted a high-density disk; you need to use one of the older double-density disks instead – PC Exchange will spot the difference and offer the appropriate formatting options. If you can't procure a double-density disk, get your ST-owning friend to send you one. Because swapping files by disk is so easy, you shouldn't need to resort to transferring files by modem or cable – unless the files are too big to fit on a floppy.
- **Commodore Amiga:** much the same as the ST, the Amiga's disk format is similar to the 720K DOS format. But Amigas need a utility called *CrossDOS* to cope with the 720K DOS format. Later Amigas include this utility as standard, but if you own an earlier model you can buy *CrossDOS 6* for £49.95 from HiSoft, on 01525 718181.
- **PC:** *Apple File Exchange* and PC Exchange can read both 720K and 1.4Mb PC disks. Getting the file onto your Mac shouldn't be a problem – unless your PC-owning friend has kindly supplied you with a 5.25-inch disk. Many PCs manufactured in the late 1980s and early 1990s have both 3.5-inch and 5.25-inch drives – so you either need to find one of these PCs, and ask the owner nicely to copy the data from the 5.25-inch disk to a 3.5-inch disk, or transfer the file by modem or serial cable.
- **Macintosh:** no problem at all. Your Mac can read any Mac disk you're supplied with. The problems won't start until you try to read the file contained on it, which we'll cover in the next section.
- **Others:** the antediluvian PCW (still in use by writers who don't know any better) can cause problems. Later PCWs were supplied with 3.5-inch disk drives, but the majority have proprietary 3-inch drives. Unless the PCW owner has an external 3.5-inch drive (rare), your best solution is cable transfer. Here you have another problem – the PCW doesn't have a serial interface. These have to be bought separately. Few PCW owners have add-on RS232 interfaces, and fewer still have modems. Good luck…

  You'll have similar problems with other ancient formats, like the Commodore 64, Amstrad CPC and Sinclair Spectrum. Your best bet is to encourage the other party to save up, buy something up-to-date and rewrite the piece. It may be quicker.

Reading them

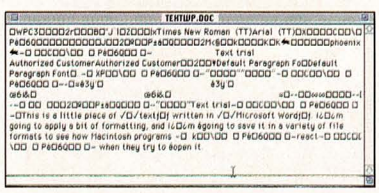
Right. You've got the alien text file onto your Mac, but that doesn't mean you can open it. And even if you can open it, you won't necessarily be able to recreate the author's original formatting and typestyles…

- **Filters:** all serious Macintosh word processors come with import filters. These are designed to translate files created with a different application so that, as far as possible, the original formatting, styling and fonts are reproduced in your own application.



Most Mac word processors come with a range of import filters for translating other common file formats. Quite often, though, even a list as long as this one won't be enough.

As long as the original application doesn't do something that your own application can't, the translations work quite well, but there are a couple of inevitable pitfalls. First, you probably don't have the same fonts. Unless the other person used standard Mac System fonts, your Mac will substitute its own fonts. Second, you'll probably



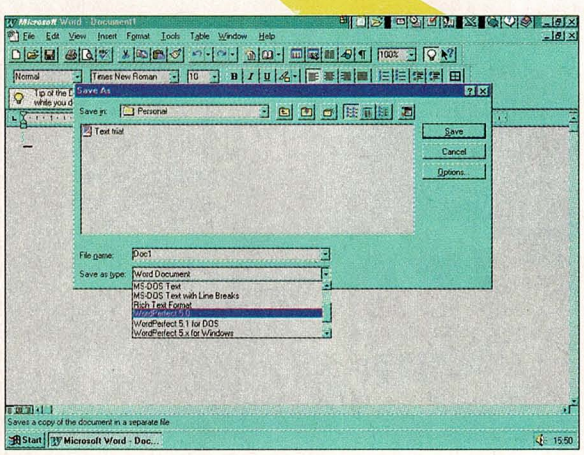
Strangely, your word processor will find it easier to read alien files from other platforms than from the Mac. Here's what *SimpleText* makes of a PC *Word 7* file – a mixture of text and gibberish.

CABLES AND MODEMS

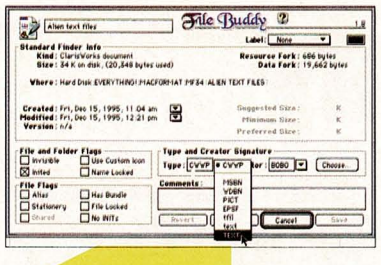
If you can't transfer your files by floppy disk, using a modem or serial cable are the only options. While the Mac end of the serial cable just needs the standard Mac serial plug, the other end needs to correspond with whatever machine you're connecting to. You may need to go to an electronic hobbies shop (such as Tandy) or a cable specialist (such as Meedmore on 0151 521 2202).

ZIPPED FILES

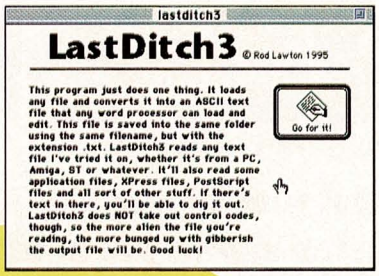
If a PC file is too big to fit onto a floppy disk, get the owner to compress it with *PKZip*. This is one of the few compression utilities with a Mac equivalent – *StuffIt Deluxe* (or the shareware version *StuffIt Lite)* can de-archive PC PKZip files, among others.



Don't let anyone send you files created by *Word 7* on the PC. Strangely, *Word 7* won't save as *Word 4* or *Word 5*, which is about the latest *Word* format most Mac applications are happy with. It's more reliable to save *Word 7* documents as *WordPerfect 5* files.



Has someone sent you a Mac file your word processor can't open? You can cheat by using *File Buddy* to change the file's type to TEXT. Now that really is cheating.


lastditch3
LastDitch3 © Rod Lawton 1995
This program just does one thing. It loads any file and converts it into an ASCII text file that any word processor can load and edit. This file is saved into the same folder using the same filename, but with the extension .txt. LastDitch3 reads any text file I've tried it on, whether it's from a PC, Amiga, ST or whatever. It'll also read some application files, XPress files, PostScript files and all sort of other stuff. If there's text in there, you'll be able to dig it out. LastDitch3 does NOT take out control codes, though, so the more alien the file you're reading, the more bunged up with gibberish the output file will be. Good luck!
Go for it!

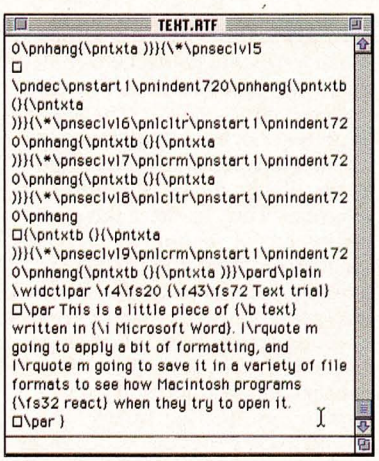
LastDitch is a stand-alone *HyperCard* application that can turn any file into readable ASCII. The only thing it doesn't do is remove junk the creator program left behind.

FONT-ASTIC

PCs use TrueType fonts extensively – if you want to view a PC text file in its original fonts, get the author to send you the TrueType files. The shareware program *Font Clerk* can convert PC TrueType fonts to Mac versions and vice versa.

have different document setups. Your margins and default tabs will probably be different (so any tabulated data will come out wrong). The only solution is for the author to use a monospaced font like Courier, and use spaces instead of tab-stops for indenting.

Still, import filters will manage to preserve type sizes, font changes, emboldening and italicisation, which is a big help. But what do you do if you don't have an import filter for the author's application? If you can, phone them up and get them to list all their **Save as...** options. You may find a common format (quite probably in a third application) that you can both use. *Word 4*, *Word 5* and *WordPerfect* are all good bets.


TEXT.RTF
0\pnhang{\pntxta)}}{*\pnseclvl5
\pndec\pnstart1\pnindent720\pnhang{\pntxtb (){\pntxta
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)}}{*\pnseclvl9\pnlcrm\pnstart1\pnindent720\pnhang{\pntxtb (){\pntxta)}}\pard\plain
\widctlpar \f4\fs20 {\f43\fs72 Text trial}
\par This is a little piece of {\b text}
written in {\i Microsoft Word}. I\rquote m
going to apply a bit of formatting, and
I\rquote m going to save it in a variety of file
formats to see how Macintosh programs
{\fs32 react} when they try to open it.
\par }

This is what RTF format text looks like – it uses codes embedded in the text to tell the application that opens the file what to do. Unfortunately, if the RTF formatting doesn't take (which is likely to be the case about 90% of the time), you just get plain text full of RTF codes

Most Mac word processors can also import PC versions of *Word* and *WordPerfect* files. The problems you face here are that the fonts will be different (PCs use TrueType fonts not supplied with the Mac) and some of the characters will be wrong (PC and Mac ASCII sets don't always coincide when you get past the basic character set).

■ **RTF:** if matching file formats doesn't work out, try RTF (Rich Text Format). This format preserves font, style and type size information by encoding it in the text. If you save a text file as RTF in *ClarisWorks*, say, you'll find all the styling information preserved when you open it again.

When you try RTF across different applications and different platforms, however, successful results can't be guaranteed. RTF format is not the same the world over: when you try to import RTF files, they either 'take' or they don't. If they 'take', you will be saved a lot of reformatting work. If they don't, you'll end up with ASCII text riddled with nonsensical RTF codes – you'd have been better off with raw ASCII to start with.

■ **ASCII:** in an ideal world, no one should have to use ASCII any more. It's primitive, limited, and can convey only the basic textual content of a file. But it works. It's a universal lowest-common-denominator, and there are few word processing programs that can't save files as ASCII (many call it 'text', 'plain text' or 'text only') and fewer still that can't read ASCII files.

Much of what we've discussed so far assumes that you are in contact with the author of the text file. If you are, get them to send you the file in several different formats, making sure they include an ASCII version as a standby.

■ **Sheer force:** if you're not in contact with the author, or they're too non-technical to help you, you'll have to work with the file you've got. Ironically, this can be less of a problem with files from other machines. If you have an awkward Mac file, your word processor will get too clever and try to work out what it is. If it can't handle that particular file format, it will give up. But with an alien file, the Mac won't be able to recognise the file type at all, so it will open it as plain text. You'll get lots of gobbledygook among the text, but you can just delete it out.

It works the other way round, too. Paradoxically, *Word 7* on the PC can open Macintosh *ClarisWorks 4* files, even though it doesn't support that format (it opens them as text-plus-rubbish), whereas a Mac owner who doesn't have *ClarisWorks 4* can't do a thing with it. Most Mac applications will look at the format, decide they don't support it, and give up. Crazy.

So what do you do? There are three options. Some freeware or shareware text editors claim to be capable of opening any text file. These are useful, but you have to track them down first. The next option is to use *LastDitch*, a standalone *HyperCard* application that can open any file and save it out as pure ASCII (it 'disables' the header information that confuses word processors). *LastDitch* has been on various past MACFORMAT CD-ROMs in various incarnations. Finally, you can cheat. Use the excellent *File Buddy* (or similar shareware file-fiddling applications) to change the file's type from whatever it was to TEXT. If you do this to a *ClarisWorks 4* file, it turns into plain text that anything can read. **MF**

MONOSPACED FONTS

Most computer fonts are 'proportional' – narrow characters like 'i' and 'l' take up less width than wide ones like 'm' and 'w'. In a monospaced font, though, the characters are all the same width. The best-known Mac monospaced font is `Courier`.

NEXT ISSUE

One way or another, you've got the alien file onto your Macintosh and found a way to open it. The more alien the file, the greater the chances that it's full of unwanted rubbish – the remnants of the encoded formatting information used by the creator application. Next time we'll work out how to extract the text from the trash.

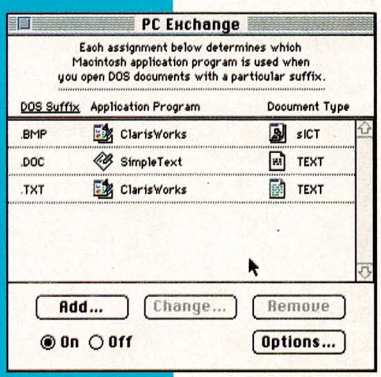
RECOGNISING DOS FORMAT

So what's the difference between *Apple File Exchange* and PC Exchange? Mac users have long been able to read DOS disks. Originally, this was done via the rather cumbersome program *Apple File Exchange*, which you had to launch before you inserted your DOS disk (otherwise the Mac wouldn't recognise the format and would offer to format the disk for you). That done, you dragged files across from one drive window to another. You could use *Apple File Exchange* to apply DOS formats to disks.

If your have System 7.1.2 or later, you will have PC Exchange – previously, it was only available as a separate product. PC Exchange is a System Extension that recognises and reads DOS disks as readily as a Mac disk. You can copy files to and from DOS disks without running a separate program and apply DOS formats to disks.

The quick way to find out if you have PC Exchange is to simply insert a DOS disk. If it comes up on your Desktop with a DOS logo, PC Exchange is installed and running. If you don't have a DOS disk, insert a Mac disk and select **Erase Disk...** from the Special menu. If you're presented with a choice of Mac and DOS formats, PC Exchange is installed and running.

If you insert a DOS disk and your Mac immediately offers to format it for you, it either means that your copy of PC Exchange hasn't been installed, or you need to search through your hard drive for *Apple File Exchange*. If you don't have PC Exchange and would like a copy, you can buy it for £42.77 from Claris, on 0181 756 0101.



Recent Macintoshes come with PC Exchange, a System Extension which automatically detects and reads DOS disks. It also enables you to choose default applications for opening common DOS file types.

Search and display

You've created your personal information manager – now Rod Lawton shows you how to find and display the correct data, and create macros to speed things up.

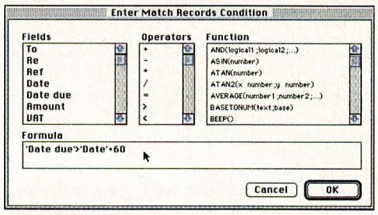
The layout/drawing tools in even a basic application like *ClarisWorks'* database module enable you to produce interesting and different 'looks' for your data, to display the appropriate fields.

Last month we looked at how to create different layouts to give you different ways of displaying your data – making the information easier to absorb and more interesting to look at.

We generated a database with all the fields you need for your own Personal Information Manager. It comprised three 'modules': contacts records, to-do lists and appointments. To create each of these modules, you simply created a layout and chose which fields were to be displayed in it.

However, this isn't ideal. Although you can switch between layouts readily enough, the information that you're entering doesn't apply across all three modules. When you create a new to-do record, for example, you only fill in the fields displayed in the to-do module. If the database tries to display this information in the contact layout, half the information is missing, because you're storing different sets of information in each module. The database doesn't automatically search through all its records for the correct information to display in that layout – as it can in a relational database.

We need to develop the database so that it only displays to-do's in the to-do layout, contacts in the contact layout, etc – so it looks for the appropriate records to display in each module, which also means searching your database for the information you want. We'll work with the *ClarisWorks* Personal Information Manager that we created last issue, but the principles apply to all sorts of databases and most database applications.



You can do some complex searches in *ClarisWorks* via the **Match Records...** option on the **Organise** menu. This produces a dialogue of mathematical functions for comparing the field contents. The formula here finds all the overdue 60-day invoices in an accounting database.

Layouts and searches

The first step is to search for records of a particular type – all to-do's, say. Like word processors, databases have a **Find** function, but in a database this function locates *all* the records that match the text you specify, not just its next occurrence. In effect, this gives you a subset of your full set of records, and this subset behaves like the full database – you can carry out another **Find** operation on this subset, print all matching records, just cycle through them one by one, or even sort them alphabetically or numerically if you want (see the 'Sorting' panel).

Database searches can be as specific as you want. The **Find** dialogue looks

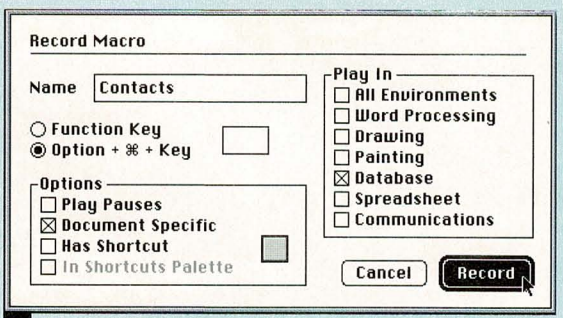
LEARNING BY EXAMPLE

Although we're using a *ClarisWorks* database here, the general principles demonstrated apply to all database applications. We chose *ClarisWorks* because it's the one most people are likely to have.

SIMPLE SEARCHING

ClarisWorks 4 makes searches easy to automate. You can now 'record' a set of search criteria, name it and store it on the search pop-up menu in the database tools area to the left of the screen.

CREATING A MACRO



1 First, you need to go to the **Shortcut/Macro** dialogue in *ClarisWorks*, choose a name for the macro, decide whether it's to be specific to this document (yes) and click on **Record**...

3 Next choose a pre-configured search operation that isolates only the Contact records (or you could manually go through the search sequence – it'll still be recorded as part of the macro).

4 Then you could also carry out a sort – in this case we're sorting the records alphabetically, based on our contacts' surnames.

2 From now on, everything you do will be recorded as part of the macro. First, choose the Contacts layout from *ClarisWorks 4's* pop-up menu (earlier versions don't have these toolbar pop-ups – you need to go via the usual menu routes instead).

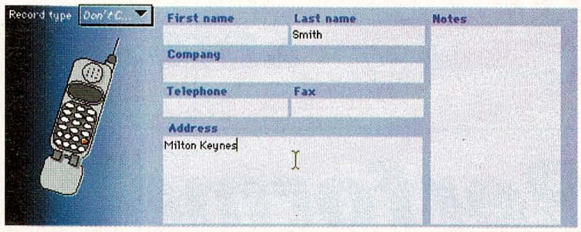
5 Now stop recording. This saves the macro so that you can use it again and again. If you're frequently carrying out the same sets of actions with your data, macros are a godsend.

SEARCHING

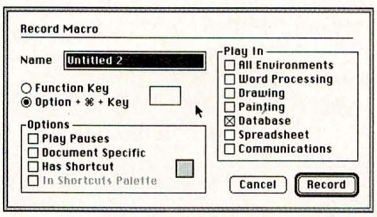
You can make your searches as broad or as tightly-targeted as you like. If you want to find the telephone number of a client called 'Smith' when you've got a database of 10,000 names, you have a problem. But if your database also stores first names and addresses, you can quickly narrow down your search to find John Smith in Milton Keynes.

You can also isolate groups of records. Imagine you're planning a sales trip to Milton Keynes with the aim of visiting all your clients there – type Milton Keynes into the Town field and leave everything else blank. And if you set up your database so that you recorded the last time you visited each client, you could narrow the search to only those clients in Milton Keynes whom you haven't visited for, say, more than a year.

You can do this using 'conditional operators'. The one we need here is the 'greater than' (>) operator. Imagine there's a field in your contact records that stores the length of time in months since your last visit (these are easy to set up, but we won't worry about how to do it right now). When you carry out the search for clients you haven't visited for a year or more, simply type '>12' into the field, and the search yields all the clients in Milton Keynes where the elapsed time is 'greater than' (>) 12 months.



When you search a database, the search dialogue has the same layout as the records you're searching. You search 'criteria' by typing text or numbers you want matches for into the appropriate field.



ClarisWorks macros are typical of those in most database applications. You get extra options with *ClarisWorks*, though: you can create a button for the Shortcuts palette, and choose which *ClarisWorks* modules the macro will be available in.

like the records, but all the fields are blank. You type in the information you want to find – so if you type a name into the Name field, the application extracts every record with that name in its Name field. If you also type the name of a town into the Town field, it finds every record where both the name and town match. If you leave a field blank, the database treats it as a 'wild card' and doesn't filter out any records, but once you insert text in a field, the application only extracts records that match it. See the 'Searching' box for a more detailed example.

For now let's get back to our PIM and its much less complex requirements. All we need to do is select only contact records, or only to-do records or only appointment records. This is easy – just use the **Find** option and specify the record type. And remember, once you've extracted the subset of 'contact' records, all the others are effectively hidden. The 'contacts' act like a database on their own until you choose to select all your records again.

Automation

Our personal information manager stores to-do's, appointments and contacts. To view each type, you have to first isolate those records, then change the layout that's being displayed. Not very slick.

The way to get round this is to create a macro, which every serious database application enables you to do. Some programs, like *FileMaker Pro*, enable you to create powerful scripts that can handle any menu option and be edited later on. Others, like *ClarisWorks*, simply enable you to record a sequence of keyboard and mouse actions, which you can then play back at will – which is perfectly adequate for what we want. Simply start the macro recorder, record the sequence of actions that isolates contact records and swaps to the contact layout, stop the macro and save it. Do the same for the to-do and appointment records, and you can then view each module with a single action rather than several. Suddenly, your Personal Information Manager looks a lot slicker, and it's certainly a lot more foolproof.

Changing layouts in our PIM is not enough – we also have to make sure we're viewing only the correct sort of record. If you display a series of to-do's as 'appointments', you get missing information and blank fields.

Next time...

If you've gone to the trouble of compiling a database, you'll want to make it work for you. With some canny search criteria and a bit of database know-how, you can squeeze exactly the information you want out of your data. And information, as they say, is power... More next issue! **MF**

AUTOMATIC ENTRY

Many database applications – including *ClarisWorks* and *FileMaker Pro* – enable you to set up fields with default entries, or a list of possible entries you choose from. This makes data entry faster, but because these choices are mirrored in the Find dialogue, it makes searches faster too.

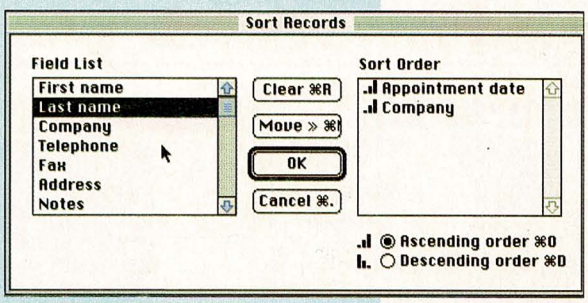
SORTING RECORDS

As well as searching for sets of records that match specific criteria, you can rearrange the order of your records in alphabetical order of your contacts' names, or in descending numeric order according to how much money they owe you, or by date.

Sorting, although a very different process, is carried out in a broadly similar fashion to searching (see the 'Searching' box). The sort dialogue gives you a list of all the fields in your database, and you select the one to sort by. Text fields are sorted alphabetically (by name, town, company or whatever other fields you have) while date, time and number fields are sorted numerically. In both cases, you can sort in either ascending or descending order. It's unlikely you'd ever want to compile a Z-A list of clients, but you might want to arrange them according to 'amounts owed' – the largest amounts first (in descending numeric order).

But a simple sort like this might not be enough. What if you have 53 clients called Smith? You'll also need to sort them alphabetically by first name, and databases will enable you to sort by more than one field. In the sort dialogue, you choose the fields you want to sort by, starting with the primary field then the secondary and so on.

It works like this: with 'surnames' as the primary field, your database will first sort all your records by surname. Where there is more than one record with the same surname, it will then do a mini-sort based on the secondary 'first name' field. If you specify a tertiary sort field as well, it is only used when you have records with the same first names and surnames – all 'John Smith' records, for example.



This sorting flexibility can be very useful for our PIM. When viewing to-do's, for example, we could sort them according to the date they had to be completed by, the person we were doing the work for, or according to their 'priority' – you could set up a priority field containing numbers from 1 to 3, for example.

Using *ClarisWorks'* Sort dialogue, you can arrange your appointments in order of date, then the name of the company involved, then the name of the individual you are to meet.

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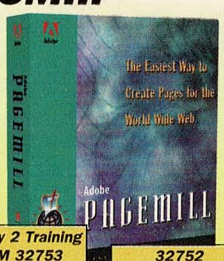

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Automate your life

Take the drudge out of those boring, repetitive Finder operations. If you have System 7.5, AppleScript can automate them for you. Rod Lawton shows you how.

BE AFRAID

Recorded scripts work using specific names and locations of items. There are certain malicious generic scripts you can easily write that would work on any Mac – a script that opens up the hard drive window, selects all the contents, drags them to the Waste-basket and empties it, for example. We're taking it as read that you wouldn't deliberately do this to someone else.

EH?

The ¬ symbol at the end of a line of code on these pages simply means that line should run as one continuous line when you type it into your program.

BE WARNED

Many of the shortcomings of recorded scripts can be overcome with a little scripting and Finder know-how (like how to modify Control Panel settings), but there are some big, big dangers to be aware of too. Finder recording is limited but safe. Finder scripting is another thing entirely, so if you don't know what you're doing, don't do it.

Last month we looked at what AppleScript is and what you can do with it. This issue, we get more practical and show you how, if you're a System 7.5 owner, you can record and edit your own scripts to take the drudge out of Finder operations.

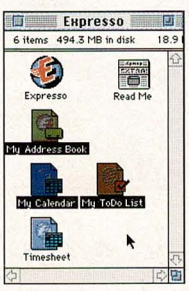
Because System 7.5 is recordable, it's easy to create your own useful script simply by recording your Finder operation as you carry it out.

Recording scripts

To record an AppleScript script, you first need to find the Script Editor. Its location on your hard disk will depend on whether you've moved things around since you got your Mac, but as a starting point, try looking for an Apple Extras folder in your Hard Disk folder. Then look for the AppleScript folder, and within that you'll find the Script Editor. Start it up.

The Script Editor window has a scrolling Description field which you can display or hide simply by clicking on the small arrow alongside. This is where you explain what your script does, either for your own reference or for others. Below that is a row of three buttons, plus a fourth on the far right. To record your script, simply press the Record button, go back to the Finder, carry out the sequence of actions you want to automate, come back to the Script Editor, press the Stop button and you're done! Easy, eh? The script you've just recorded is displayed in the window below (in programming gibberish), and pressing the Run button will run it again.

You won't need to use the Syntax button (on the far right) when you record a script; it's only used when you're writing AppleScript code from scratch, directly into the window. This is not for the faint-hearted, however, since AppleScript uses some fairly precise syntax, and the Syntax button checks that your script is correctly written before you try to run it.



Because opening files is a Finder action, you can open files created by applications that aren't necessarily AppleScript-compliant. You can even open groups of files.

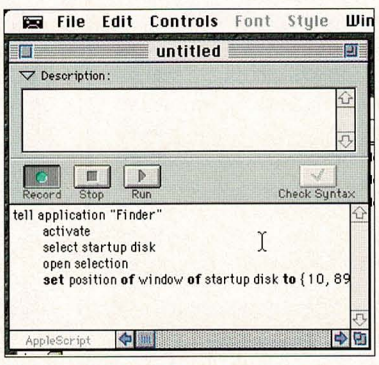
An example script

Does your Desktop ever end up a mess of open windows, so that your Hard Disk icon is obscured? It's easy to record a script that not only opens your hard disk window, but even sets its location and size. Here's one we prepared earlier:

```
tell application "Finder"
  activate
  select startup disk
  open selection
  set position of window of startup disk ¬
  to {3, 40}
  set size of window of startup disk to ¬
  {254, 413}
end tell
```

This is what you will see in the Script Editor window after you've recorded yourself double-clicking on the Hard Disk icon and dragging the window to the location and size you want. Although AppleScript is a fairly complex language, this script is easy to follow. Within the paired 'tell' commands is a sequence of instructions for the thing we're issuing instructions to – in this case the Finder.

Starting with an easy example like this makes it easier to follow what's happening when you start adding bells and whistles. For example, do you prefer to see the contents of your windows in list or icon view? If you prefer list view, and you prefer to view items by kind rather than by name, you can build this into the script simply by selecting these options while you're recording. (It doesn't matter if they're set correctly already – you must still go through the motions.) The result is this slightly longer script:



Using the AppleScript Script Editor, you can record Finder scripts (as long as you have System 7.5). These are displayed in the editing window, where you can also write your own raw code.

```
tell application "Finder"
  select startup disk
  open selection
  set position of window of startup disk ¬
  to {3, 40}
  set size of window of startup disk to ¬
  {254, 413}
  set view of window of startup disk to ¬
  kind
end tell
```

When you've got your script running exactly as you want it, it's a good idea to save it. Firstly, you should choose between saving it normally or saving it as a Run-Only version. Only choose Run-Only if you're 100% sure the script is right – you won't be able to edit it again. Use the normal Save As option if you think you might want to come back to the script again later.

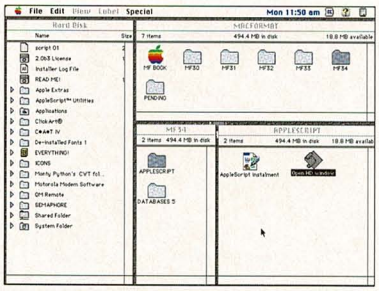
Whether you're saving as Run-Only or normal Save As, you can choose between saving your script as a text file, as a compiled script or as an application. Normally, you'd save a script in compiled version, but if you want a text file you can open using a word processing document, then choose the Text option. If you want to test your script as a standalone application, though, choose the final option.

Limitations and bonuses

There are – irritatingly – a number of Finder sequences you can't automate. You can't automate Control Panel actions like changing your Mac's volume level, you can't 'Hide Others' from the Applications menu, and you can't change the number of sub-levels of folders visible in windows' list views – to name but a few. The only way to find out whether you can automate a sequence using AppleScript is to try it. If AppleScript can't record a command, it simply doesn't appear in the Script window and doesn't happen when you run the script.

The good news, though, is that you can launch applications without knowing how to program them with AppleScript, or without them being even AppleScript-compliant. This is because launching an application is a Finder command rather than an application-specific command. The following script launches *Z88-to-Mac*, a translation utility that was written long before AppleScript was even thought of:

```
tell application "Finder"
  activate
  select file "Z88-to-Mac" of folder ¬
```



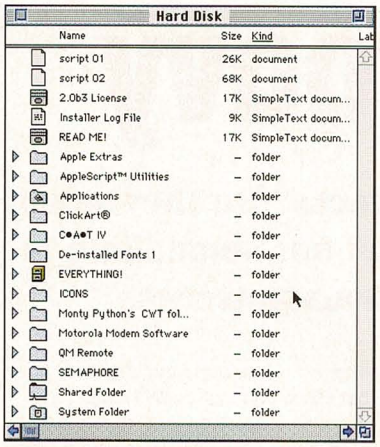
Do you like all your folder windows opened in just the right place and arranged neatly? Then why not record a script that does it automatically? You could even add it to your Startup Items folder...

```
  "Applications" of startup disk
  open selection
end tell
```

The same trick works with files – so you could generate a script that arranges specific folder windows neatly on your Desktop before launching an application.

Better still, a script that launches an application carries on running in the background, so you can open several files at once even with a non-AppleScript-compliant application. For example, this script opens three separate *Expresso* files, then launches the application *Z88-to-Mac:*

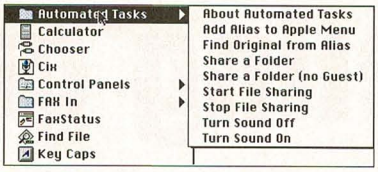
```
tell application "Finder"
  activate
  select file "My Address Book" of ¬
  folder "Expresso" of folder ¬
  "Applications" of startup disk
```



Would you say you were an 'icons' person or a 'list' person? Using AppleScript you can make sure your folder windows always open in exactly the view that suits you, saving... ooh, seconds.

```
  open selection
  select file "My Calendar" of folder ¬
  "Expresso" of folder "Applications" ¬
  of startup disk
  open selection
  select file "My ToDo List" of folder ¬
  "Expresso" of folder "Applications" ¬
  of startup disk
  open selection
  select file "Z88-to-Mac" of folder ¬
  "Z88 STUFF" of folder "Applications" ¬
  of startup disk
  open selection
end tell
```

Most Finder actions can be automated. For more insight and inspiration, take a look at the **Automated Tasks** option in the **Apple** menu, which gives you direct access to the AppleScript scripts supplied with System 7.5. Read through the Automated Tasks using the Script Editor – that way you can get more ideas as to what you can do with AppleScript, and see how the programmers have made scripts work. These scripts do things you can't do by simply recording your actions, which is where programming knowledge is useful, not to mention Apple's AppleScript kit. Although the Finder is recordable, there are many more commands available than the recording process can recognise – but you need programming expertise and the reference documentation to use them.



System 7.5 comes with several AppleScript Automated Tasks, which you can find under the Apple menu and in the AppleScript folder.

Next time

Recording your scripts is easy – and editing and refining them is not much harder. Next time we'll look at how recorded scripts are only the start, and how a little programming know-how can add a lot of scripting power... **MF**

BE ALERT

AppleScript isn't entirely predictable in the way it deals with alerts when it plays back scripts. Sometimes it ignores them (using the response you gave when you recorded the script). Other times it stops and gives you the alert anyway. And others it dumps you out with an error. You know the 'last chance' alert you get when you manually empty the Wastebasket. Recorded scripts don't display this, so be very careful with scripts that empty the Wastebasket.

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Feeling groovy

Can't get groove into your drum tracks? Do they sound lifeless and mechanical? Ian Waugh has some hints to help you with programming your drum patterns.

NO LAUGHING MATTER

There are more musician jokes about drummers than any other instrumentalist. Sample: Q – what happens when a drummer knocks on your door? A – it speeds up!

It's more difficult to create a convincing drum track than a lead line or chord accompaniment. Not only must it have a good rhythm, but that rhythm must also have groove.

What's a groove? In its widest sense it's a combination of rhythmic and tonal variations that sit well together. A perfect musical performance does not mean hitting the exact notes at the exact time. Analyses of virtuoso performers – of all instruments – have shown that it's the subtle variations in timing and accent that turn a technically accurate rendition into a moving performance. So the first thing we must do is give our drum patterns feel – in other words, humanise them.

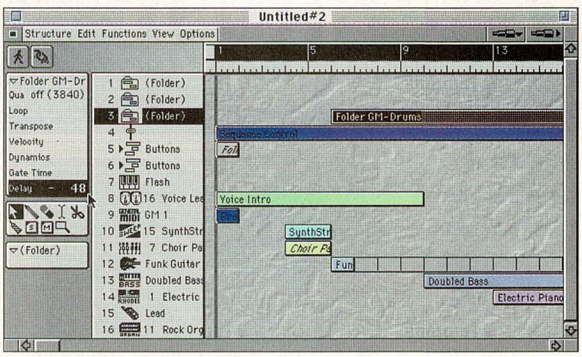
The machine gun effect

If you record a drum pattern in step-time, the timing of the notes will be 100% accurate and have the same velocity value unless you ensure they don't. Such a drum line sounds like a machine gun – regular monotonous hits. It's particularly evident with hi hat lines. You can avoid this in two ways. The first is to vary the velocities of the hits – the harder you hit a note on your keyboard, the louder the note emitted. In the case of a 1/16th note hi hat line in a rock pattern, for example, make beats one and three the loudest and vary the velocities of the other hits. Try substituting an open hi hat for the last hit. You can change the feel of a piece by accenting different hits – make hits 1, 7 and 13 the loudest for a Latin feel, for example.

The second way is to vary the timing of the hits slightly. Subtlety is the name of the game here – we're talking about shoving them around by less than 1/64th note. The easiest way is to adjust the timing in an Event editor. As a rule of thumb, trust your own judgement – if the timing sounds too far out, it is. Leave the accented hits on the beat to preserve the timing.

Many sequencers have a Random or Humanisation function which you can apply to velocities and timing to humanise them. Use with care, because this does exactly what it says – it adds random variations. Human musicians vary the timing and velocity as they play, but they use their musical judgement – it's not random.

Another rule of thumb – adjust the main hits and beats manually as described above and then apply a teeny bit of randomisation to the other hits.



Using a sequencer's Delay parameter you can apply a positive or negative delay to a drum track to make it push or drag the beat.

Real feel

If you want an authentic human feel, record the drums in real time. If you record several bars at a time, the chances are consecutive bars will be slightly different, thus adding to the human feel. Many people record one drum at a time, perhaps starting with the bass, followed by the snare, the hi hat and then other drums. Try recording the bass and snare together, as these are usually the foundation of the rhythm and are inexorably linked. Then add the hi hats – don't forget to use the open hi hat, too. Use two hands during recording and you'll probably find you can make the rhythm flow better. If your real-time recording sounds a bit raggy, by all means quantise it, but use partial quantisation (see MACFORMAT 30 for more information about quantisation).

When you're recording drum parts it's a good idea to put each drum – other than bass and snare – on a different track. It makes the pattern much easier to edit – you can record alternative hi hat and tom lines, for example. It also makes it easier to adjust the velocities and timing of individual drums.

Bend it

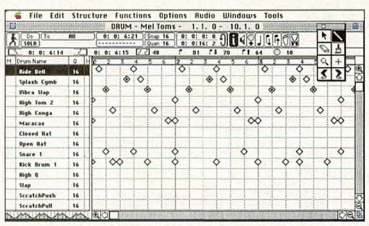
Much of the interest in a drum pattern comes from the variations in sound caused by the drummer hitting the drums in different places, and with

BY GADD

Having problems writing great drum patterns? If Steve Gadd can't make it to your session, why not buy in some drum patterns created by experts? The following companies produce drum patterns in all manner of styles in MIDI file format, which you can adapt to suit your songs. They will all send you a catalogue if you ask nicely:

- Hands On MIDI Software on 01705 783100
- Heavenly Music on 01255 821039
- Keyfax Software on 01734 471382
- Labyrinth on 01254 678915
- MIDI Magic on 01792 642381
- Newtronic on 0181 691 1087
- Reel Feel on 0171 241 0621
- Station Records on 01787 311500

GET READY TO ROCK

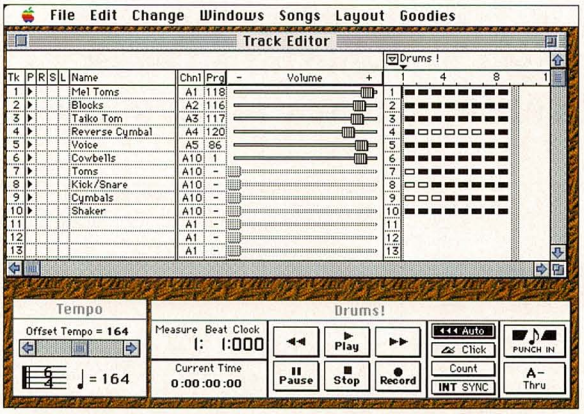


In *Cubase's* Drum Editor, you can rearrange the order of the drums by dragging them up and down the list on the left, putting the drums you use most often together.

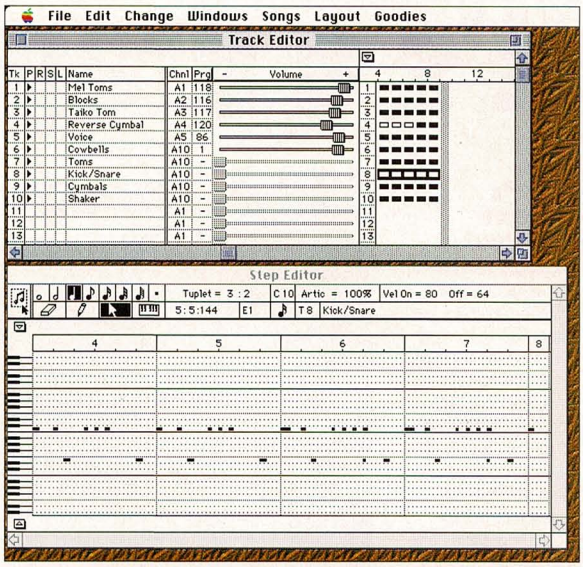
If you are using a Drum editor to create drum patterns, rearrange the order of the drums so that those you use most often are at the top of the list, and group the drums together in a convenient order. In the General MIDI drumset, for example, the hi hats are separated by toms and the cymbals are an octave away. If you're writing rock or pop patterns, try creating a drum layout with the most popular drums grouped together.

Unlike instrument voices, which sound for as long as you hold down a key, drum voices are 'one shot' sounds – they're each created by a sample which plays in its entirety, no matter how long or short the note that triggers it may be.

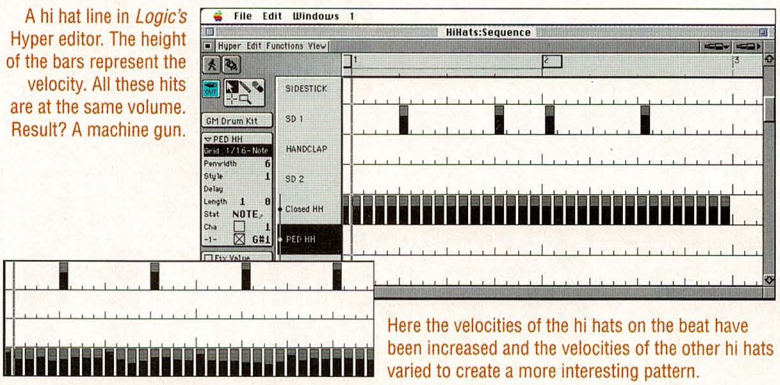
It's common practice for MIDI programmers to use a short fixed note length for drum sounds, typically five or eight beats long. This makes drum parts easier to read in a Grid editor, for example, and the short notes don't clog the MIDI channel. If you record a drum part in real time, it's usually easy enough to change the note lengths using a Transform or Length Change function.



Recording each drum on a separate track makes them easier to edit later on, and you can then easily apply timing offsets and velocity changes to them.

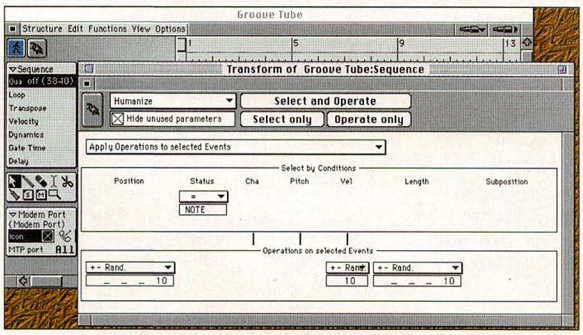


You often get a better feel if you record the bass and snare drums together, because they are the foundation of most drum rhythms.



A hi hat line in *Logic's* Hyper editor. The height of the bars represent the velocity. All these hits are at the same volume. Result? A machine gun.

Here the velocities of the hi hats on the beat have been increased and the velocities of the other hi hats varied to create a more interesting pattern.

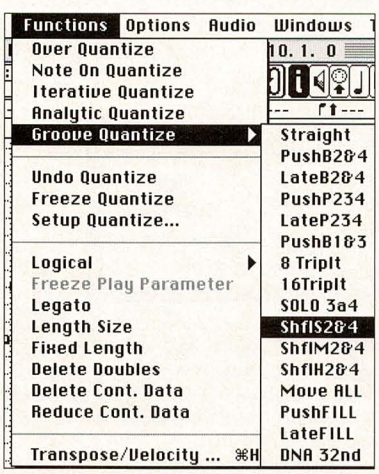


Logic's Transform function has a Humanise preset, which applies plus or minus 10 to a note's velocity and length.

more or less force. The drum sounds in some instruments do vary according to the velocity of the note. In particular, most samplers can make a velocity value cause a pitch change, duplicating the tonal variations produced by a real drum kit.

If you don't have a sampler, or if the set of drum sounds in your instrument does not respond to velocity information, you may still be able to create tonal variations. Most synthesisers enable you to edit the drum sounds, so detune a drum, assign it to another note number and use it occasionally in place of the original sound. You could even create three or four alternate drums this way.

If you cannot edit the drum sounds on your synth, check if they respond to pitch bend information. If so, you can add a little pitch bend to certain hits. It's probably easiest to draw this in using a Graphic Controller editor, but be aware that the pitch bend will affect all other hits occurring at the same time on the same channel. You can avoid this by using two MIDI channels for the drums – one for straight drums and one for those with pitch bend. General MIDI drums are fixed to MIDI channel ten, so you cannot use this with them, but you can use the drum sounds at the top of the normal voice list and bend these.



Cubase's Groove Quantise function can apply a rhythmic groove pattern to a set of notes.

Push me pull you

You may have heard the expression 'driving the rhythm'. It's used when a drum part seems to be pushing the song forward. The effect is produced by playing the drum track very slightly ahead of the rest of the song, which then seems to be following it. You can do this using a sequencer's Delay or Offset function, but don't overdo it or the drums and the rest of the song will be out of sync. You can also give a track a push by moving the snare drum forward a little. In most rock patterns, the snare occurs on the off beat, on beats two and four. Anticipating the beat slightly helps it propel the rhythm along.

If you do the opposite and delay the snare, this produces a lazy feel, as if the rhythm is dragging behind the rest of the song. This is probably most useful with swing patterns where you want to create a laid-back feel.

In the groove

Many sequencers have a Groove function that imposes a particular rhythm on a set of notes. It can, for example, turn a straight 1/8th note pattern into a swing. If your sequencer supports grooves, try experimenting with them. If you can create your own grooves, do so using any drum tracks you particularly like. Apply the groove from the drum part to the bass line to ensure that the two parts – which are primarily responsible for the overall rhythm of a track – are really tight.

Creating good drum patterns is an art in itself and there is no one way to go about it. Above all, let your ears be the final judge. If it sounds good and grooves, you've got it right! **MF**

SEQUENCER ROUND-UP

Prices:

- Steinberg's *Cubase* – £399
- Steinberg's *Cubase Lite* – £99
- Emagic's *Logic* – £399
- Emagic's *MicroLogic* – £99
- Passport's *MusicTime* – £99.95
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- Opcode's *EZ-Vision* – £99.95
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Contacts:

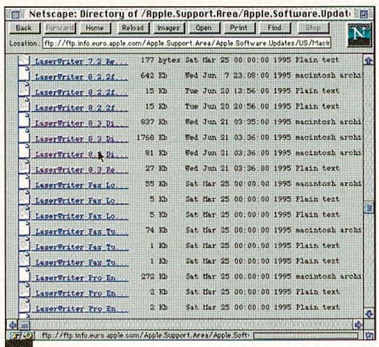
- Steinberg: Harman UK on 0181 207 5050
- Emagic: Sound Technology on 01462 480000
- Passport: Arbiter on 0181 970 1910
- Mark of the Unicorn: Klemm on 01462 733310
- Opcode: MCMXCIX on 0171 723 7221
- OSC: Natural Audio on 0181 207 1717

It's a drag

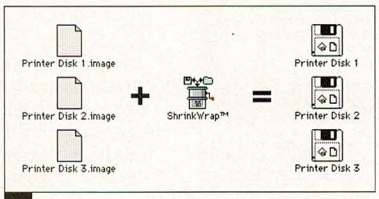
Drag and drop printing makes life easier and is now freely available for all Macs. Derek Smith shows you how to get started.

WHAT'S DESKTOP PRINTING?

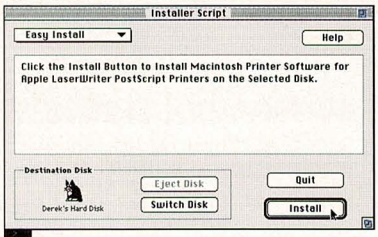
Desktop printing gives you drag-and-drop printing capability. You can create an icon on your Desktop for each printer on your network, then print any document to the printer of your choice simply by dragging the document icon onto the appropriate printer icon. The system does it all for you – there's no need to fiddle about in the Chooser.



1 Desktop printing is an optional part of the LaserWriter 8.3 printing software. It's bundled with new printers and is on this issue's Cover CD, or you can find it on the Internet at **ftp://ftp.info.euro.apple.com/Apple.Support.Area/Apple.Software.Updates/US/Macintosh/Printing/LaserWriter/**



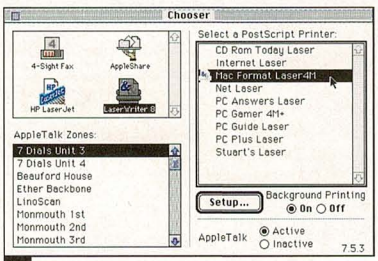
2 If you've downloaded the software from the Internet, unstuff the files using *StuffIt Expander*, then mount the disk images by dragging the three files onto *ShrinkWrap's* icon. Both programs are on this issue's Cover CD.



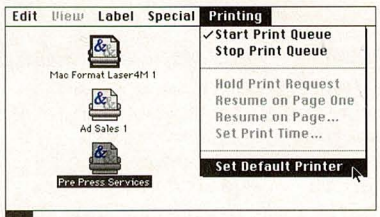
3 To install LaserWriter 8.3, open the **Printer Disk 1** folder and double-click on the Installer icon. Click **Continue**, then, unless you have strong religious views to the contrary, opt for **Easy Install**. Once it's finished, restart your Mac.

SYSTEM

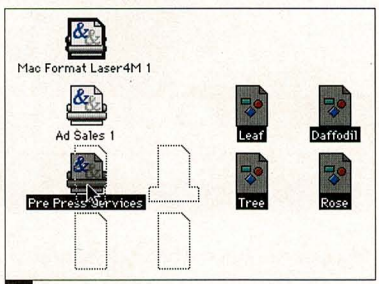
Desktop printing requires System 7.1.1 or later – another excuse to upgrade.



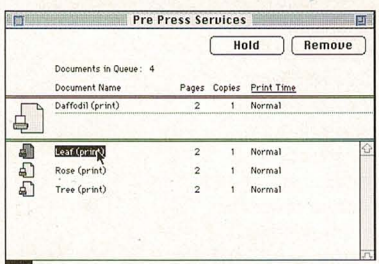
4 Creating a Desktop icon for a printer couldn't be easier. Simply select a printer from the Chooser as you would usually, and an icon for it is automatically created on the Desktop.



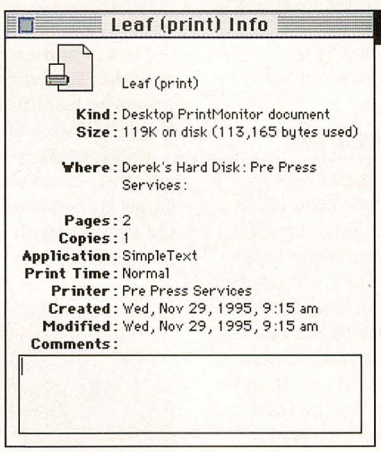
5 Click on one of these icons, and a **Printing** menu appears. To select a printer as your default, click once on the printer icon and select **Set Default Printer** from the **Printing** menu. It now gains a black border.



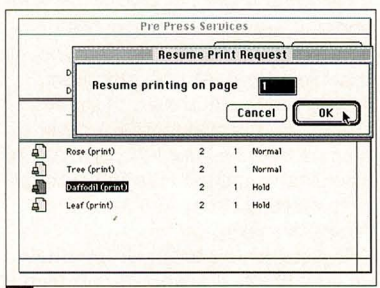
6 You can now print to the default printer in the usual way, by selecting **Print** from within a program. Alternatively, you can print by dragging a file onto any of your printer icons, not just the default printer. You can change the name of a printer icon like any other icon.



7 At any time you can double-click on a print icon to see an interactive list of documents to be printed. You can drag items up or down the list to re-order them, and drag them to the bin, or to another printer icon.



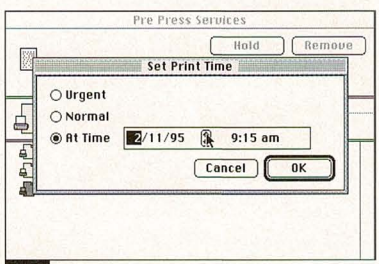
8 If you want to see more information about a print job, click on it and select **Get Info** from the **File** menu. You'll be able to see details about print jobs such as the number of pages, and how many copies requested.



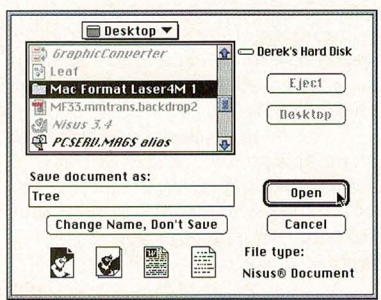
9 To indefinitely delay a job, click on it, then click the **Hold** button just above. That job will not print until you select it and click the **Resume** button, then it offers you a choice of which page to resume at.

LATEST VERSION

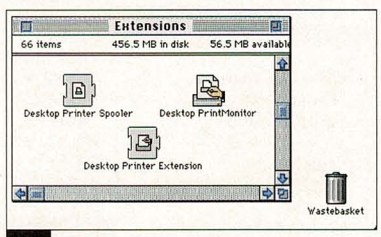
If you own a PCI Mac then you'll need the updater pack, called Desktop Printing 1.0.3. You'll find it on the Internet at **ftp://ftp.info.euro.apple.com/Apple.Support.Area/Apple.Software.Updates/US/Macintosh/Printing/Other_Printing/**



10 You can specify a particular time for a document to be printed. Click on the job in the print queue, then select **Set Print Time** from the **Printing** Menu, and enter the time into the dialogue box.



11 When you save a document from an application, Desktop Printers will be displayed as folders in the **Save** dialogue box. Do not save files into these folders, otherwise they will be lost.



12 To de-install Desktop Printing, drag the following files from the Extensions folder in the System Folder to the Wastebasket: Desktop PrintMonitor, Desktop Printer Spooler, Desktop Printer Extension.

MAC ANSWERS

All right, put those rubber gloves down and form an orderly queue. MACFORMAT's experts are back once more to solve all your Mac problems.

Welcome to MacAnswers, the bit of the magazine devoted to solving your Mac troubles. You may have recovered from New Year, but has your Mac? Once you've hoovered the bits of mince pies out of your keyboard and removed the empty beer cans from the top of your monitor, you might find your digital pal is being a bit temperamental.

Fortunately, MACFORMAT's experts are on hand as usual, albeit with a hangover. If you have a query, send it in, or e-mail us on **macformat@futurenet.co.uk** including full details of your Mac, and 'MacAnswers' in the subject title. Sorry but we can't reply personally or answer queries over the phone, because we're all still ill.

33MHz speed limit

CLOCK SPEED

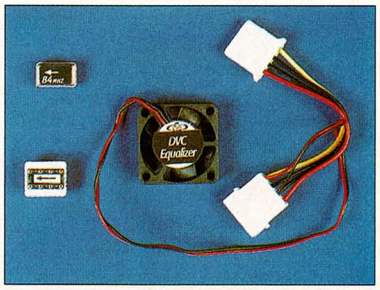
Q *The Performa 630 is often advertised as running at 33/66 MHz. What does this mean?* TattleTech *tells me that my 630 runs at 33MHz. Can I make it go at 66MHz, and if so, how? Is a clock-chipping accelerator the answer?*
Michael Minchin, Oxford

A This is a confusing and perhaps misleading way of advertising some Macs. The first figure, 33MHz, is the speed at which your Mac's processor runs. The second figure, 66MHz, is the bus speed. The data bus carries information to and from your processor, and in some Macs (such as the 630) the data bus runs at a faster clock speed to boost the performance of the Mac as a whole. Unfortunately, you can't get your Performa's processor to run at 66MHz – the chip would overheat and make your Mac crash.

A clock-chipping accelerator that boosts the Performa 630's processor to 40MHz is being developed by Xtal (pronounced 'crystal'). The accelerator, available from February, is reputed to increase the 630's overall performance by 30% and is expected to cost around £100. For more details, contact Xtal on 0181 421 8557.

Alternatively, for around £370, you can get a full 68040 processor for your Performa. The 630 comes without an FPU (Floating Point Unit), which excels at complex mathematical calculations; the 68040 upgrade gives you a full FPU and enables you to use FPU-reliant applications such as spreadsheets and 3D modelling programs. For more details, contact Performance Direct on 01784 477 477.

For speed on a limited budget, check out our Beat the Clock feature in MACFORMAT 31 (turn to page 115 if you missed that issue). It has 50 cracking tips to speed up your Mac, and 37 of 'em won't cost you a penny!



A clock-chipping accelerator such as this one will make your Mac go faster, but it will invalidate your guarantee. See '33MHz speed limit'.

Well, yes but...

STARTING UP

Q *I use a lot of Extensions by necessity, resulting in a long row of icons that show at startup and take forever to do so. Can I suppress these, and if so, how?*
David Murray, Helsinki, Finland

A I'm afraid there is no way to stop an Extension icon showing up at startup unless the author of the Extension has provided an option to do so. Even then, this won't actually make your Mac start up any faster, because it still has to load the Extension into memory and this is what really takes the time. However, there are ways of speeding up the startup process without spending any money or junking your favourite Extensions.

During startup, your Mac wades through the entire contents of the System Folder looking for the bits it needs to load into memory – including Control Panels, Extensions, fonts, and sounds within the System File. The first thing you can do is throw away some of the non-Extension files that reside within the System Folder, and a good starting point is the Preferences Folder, which holds the preferences of every application you run on your Mac. Go through this and throw away all the files that belong to applications you no longer have or don't run any more. Then open your Fonts folder and move any non-essential fonts into a folder outside the System Folder. Now open the System File and bin any sounds that you never use (that should be at least five of 'em).

Over a period of time, particularly if you have a lot of software installed on your Mac, you will find that your System Folder gets bloated. We checked the size of the System Folder on the office IIci and were shocked to see that it was hogging over 60Mb of disk space. A rapid and early spring clean reduced that to a more reasonable 25Mb. Doing this every couple of months keeps your System Folder nice and trim, and cuts down the amount of rubbish your Mac has to wade through during startup, making the process much faster.

Cruising the keys

We're always on the lookout for tips, tricks, or hidden 'features' you come across while going about your daily Mac business. So if you've got any, send them in to 'Cruising the keys', MACFORMAT, 30 Monmouth Street, Bath, BA1 2BW. Meanwhile, here's an early Easter egg...

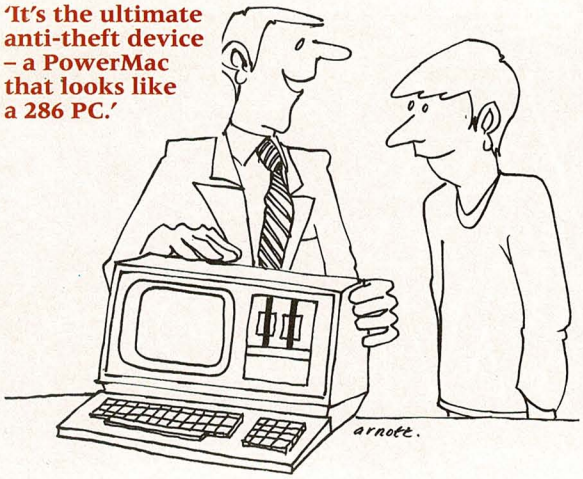
If you own a brand new PCI PowerMac running System 7.5.2, type 'secret about box' into a SimpleText document (or any other drag-and-drop-savvy program), highlight this text and drag it onto the Desktop. After a moment or two, you will treated to a picture of Apple's HQ in Cupertino with a intriguing flag that follows the cursor around the screen.

A nut writes...

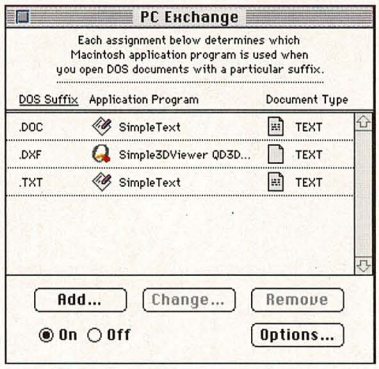
COMPATIBILITY

Q *I can't get* NASCAR Racing *to work on my Performa 636CD. I converted about four of the programs through PC Exchange, but I got to the last one and my Mac said 'not enough memory'. My questions are:*
1. What is virtual memory?
2. What is 32-bit addressing? Do I need it switched on?
3. How do I get PC Exchange to convert NASCAR Racing?
4. In Macintosh Easy Open, what do the three buttons do? Should I turn them on?
5. I don't understand the 'Delete Prefer-

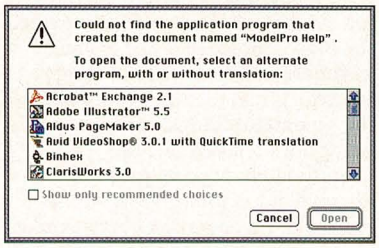
Continued on next page



'It's the ultimate anti-theft device – a PowerMac that looks like a 286 PC.'



Using the PC Exchange Control Panel you can quickly and easily convert a DOS or Windows document into a Mac document...


Could not find the application program that created the document named "ModelPro Help".
To open the document, select an alternate program, with or without translation:
Acrobat™ Exchange 2.1
Adobe Illustrator™ 5.5
Aldus PageMaker 5.0
Avid VideoShop® 3.0.1 with QuickTime translation
BinHex
ClarisWorks 3.0
Show only recommended choices
Cancel
Open

...and Macintosh Easy Open presents you with a list of applications you can use to open it. But neither can make a DOS game work on your Mac.

ences' button. What's it for?
6. Under ***DOS in Macintosh guide****, do I select* ***Open File****,* ***Creating a file in DOS format****,* ***Set up the Mac to use DOS files****, or* ***Use a DOS disk****?*
Barry Soule, Round Rock, USA

A 1. The 'Use Virtual Memory' option in the Memory Control Panel enables you to use a portion of your hard disk as your Mac's memory. This ingenious little option artificially boosts your Mac's memory, so you can open bigger files or applications. However, it's unbelievably slow and not all applications will work with it.
2. 32-bit addressing is an option on older Macs that were originally designed to work in 24-bit mode. Turning on 32-bit addressing enables your Mac to use more than 8Mb of RAM – but all Macs made in the last two or so years are permanently in 32-bit mode and can't be switched back, so the option is not given. This includes your Performa 636CD (which is an American version of the Performa 630).
3. You can't convert the whole *NASCAR Racing* program to a Mac file because it's too big, and PC Exchange was only designed to convert small documents. Even if you did manage to convert the program, it still wouldn't run on your Mac because it is programmed specifically for the PC – and this is the crux of your problem. If you really want to play the game on your Mac you'll have to get hold of Apple's DOS compatibility card for the 630 (which has been released in the States, although not yet in the UK). Contact Apple on 0800 127753 in the UK, or 408 996 1010 in the States.
4. Macintosh Easy Open enables you to open documents that have been created using applications you don't have installed on your Mac. The Control Panel has three options which you use to control how documents are opened. When checked, the 'Always show dialog' option displays a list of applications and translators installed on your Mac whenever Easy Open is invoked, or whenever you double-click on a document that you don't have the creating application for. The 'Include applications on servers' is handy if you are on a network. It includes a list of applications stored on all Macs you're connected to. Lastly, the 'Auto-pick if only one choice' option does exactly what it says: if your Mac can only find one application that can open the mystery file, then that application is launched for you.
5. Macintosh Easy Open keeps a list of applications you've used to open documents on your Mac. For example, if you need to open a *Word* file, but don't have *Word*, you can open the file using *ClarisWorks*. If you come across a similar file at a later date, Macintosh Easy Open suggests the same application, or even launches it for you. The 'Delete Preferences' button in the Control Panel deletes this list and resets any preferences you may have for opening documents created by applications you don't have – handy if you don't want to open *Word* files with *ClarisWorks*.
6. Apple Guide, introduced with System 7.5, is designed to help make using your Mac easier. If you aren't sure how to do something on your Mac, click in the **Help** menu (second from the right in the menu bar) and drag down to **Macintosh Guide**. A grey window appears with a list of topics, under which you can find commonly asked questions about the Mac, along with the answers to them. The Guide itself can't open files or launch applications for you though – the most it can manage is to open the odd folder. In this case, Apple Guide tells you how to use DOS files and disks, but you can't actually get it to open or create DOS files.

Macintosh rescue

WASTEBASKET

Q *From time to time I find 'Rescued items from hard disk' in my Wastebasket. What are these? Why have they been rescued? Using* Corel Gallery Clip Art *seems to produce lots of these.*
William S White, Hexham, Northumberland

A Most Mac applications create invisible temporary files on your hard disk to store data from memory that's not immediately needed. These are called scratch files, and are usually deleted from your hard disk when you quit the application. Normally they reside in an invisible folder on your startup disk, but occasionally your Mac crashes, or an application unexpectedly quits, in which case these files are never deleted. Next time your Mac starts up, it checks the Temporary Items folder to see if there's anything in it. If there is, it moves them to the Wastebasket and makes them visible.

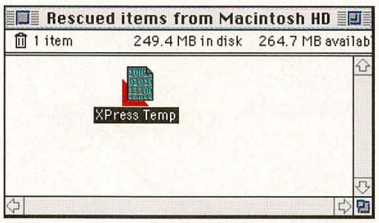
You should be able to recover documents lost during a crash from these temporary files, but in practice programmers are far too lazy to make the temporary files' data structure the same as an ordinary document's, and 90% of the time these scratch files can't be opened by the application that created them, so you might as well delete them. The *Corel Gallery* viewer is either not deleting its temporary files on quitting, or your Mac is crashing before it can delete them.

Too many colours...

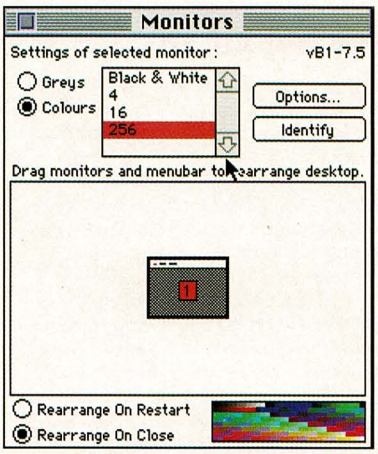
MONITORS

Q *Some time ago I bought* Populous 2, *but I can't get it to work – it just kicks me back into the Finder, with the message 'This game only works with 16 colours.' Is there any way I can get the Finder to report 16 colours instead of 256? Do I have to mess with the System resources, or is there a shareware program that will make my game work? I'm running a 7100/66 with an Apple 17-inch MultipleScan monitor.*
Haje-Jan Kamps
Spikkestad, Norway

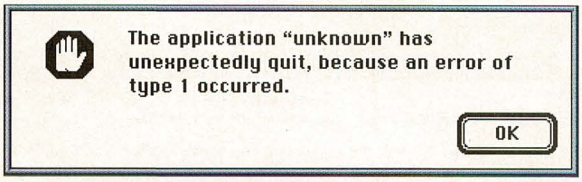
A This sounds a bit dodgy. You should be able to simply open the Monitors Control Panel and change your Mac's screen to any colour depth from black and white to 256 colours – 16 colours being one of the options. I can only assume that either you don't have this Control Panel, or it has been damaged in some way. In either case, you should reinstall it from the original System disks that came with your Mac. You can't fix this problem by 'messing' with the resources inside your System File, as you put it, and please don't try. Your Mac is a delicate



What are these, and where did they come from? And why did they need to be rescued in the first place? See 'Macintosh rescue.'



Usually changing the number of colours your Mac displays on a monitor is as easy as clicking in the Monitors Control Panel. But what if it's damaged? See 'Too many colours'...



Probably the most infuriating facet of the Mac's otherwise friendly operating system – the cryptic error message. See 'Wipeout'.

beast and it won't appreciate its System files being hacked open with *ResEdit* and changed willy-nilly.

...and not enough

MONITORS

Q *Many programs now require a minimum of 256 colours. My Performa 400 will only display black and white or 16 colours. How do I upgrade to 256 colours?*
WR Jones, Antrim

A The Performa 400 is identical to the LCII, which means you can install up to 512Kb of video RAM (VRAM), which is what you need to display more colours. But your Performa 400 comes with 256Kb of VRAM, which should be enough to display 256 colours on a 13-inch (640 x 480 pixels) monitor. I can only assume that you have a larger monitor than this hooked up to your Mac.

The Performa 400 and LCII models only have one VRAM slot, so you will need to replace the existing 256Kb card with a 512Kb card, which you can get for around £40. We strongly recommend you get someone who knows their way around the inside of a Mac to fit it for you.

Wipeout

ERROR MESSAGES

Q *1. If I use* Wipe Info *from* Norton Utilities 3.1 *on my Performa 5200, the screen crashes and a dialogue box appears saying 'The application "unknown" has unexpectedly quit because an error of type 1 occurred.' This happens with Extensions on or off.*
2. I get an error message when I try to restart or shut down when using the shareware screen saver Tiny Saver. *'The Shutdown could not be completed because the application "unknown" could not quit.' If the screen hasn't been 'saved' (ie gone black) the message does not appear.*
3. Norton System Info *tells me my processor is a PowerPC 604 running at 62MHz. Is this right?*
Alex Taylor, Staines, Middlesex

A 1. Error Type 1 is defined as a 'bus error', which means the application tried to access a bit of memory that doesn't actually exist. However, this is only your Mac's best guess at what's happened – in practice anything could have caused *Wipe Info* to quit. Try giving it a bit more memory in the **Get Info** box in the Finder.
2. This is a problem with the screen saver itself and not your Mac. When you select **Shut Down** or **Restart** from the **Special** menu, your Mac sends an Apple Event message to all open applications telling them to quit. It would seem that your screen saver is ignoring this message and stopping your Mac from completing all the things it has to do before switching itself off. This is a problem you can't fix yourself – you will need to either do without a screen saver, or try another similar program such as *Eclipse*, on last issue's Cover CD.
3. No, that's not quite right. Your Performa 5200 is based on a PowerPC 603e running at 75MHz. The only Macs that currently use the 604 chip are the PowerMac 8500 and 9500. It looks like *System Info 3.1* is probably having difficulty recognising what processor is in your Mac because it predates the 603e chip. The PowerPC 603 chip, which *Norton Utilities* is programmed to recognise, was replaced at a late stage by the 603e, which uses less power. This is not a serious problem, as it won't affect the performance tests *System Info* runs.

Disk troubles

DRIVES

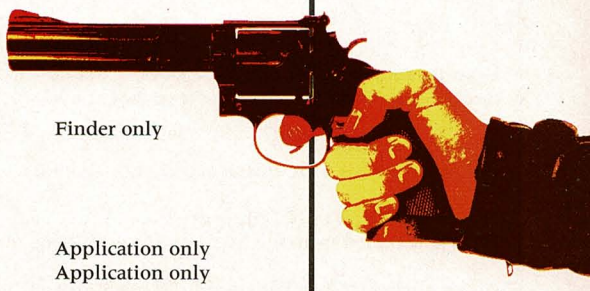
Q *1. When I tried to run* Camera-Man.mov *using* QuickMovie *(both on the* MACFORMAT *30 Cover CD),* CD-ROM Toolkit *gave me the following message: 'Notice, an attempt was made to read information past the end of a CD-ROM volume. The problem is probably caused by an incorrect CD-ROM mastering, and vital blocks at the end of a partition were not written. Consult the source of the CD-ROM.' So that's what I'm doing. I own an LCIII, with System 7.1, 4Mb of RAM doubled to 8Mb using* RAM Doubler, *and a double-speed external CD drive.*
2. I'm planning to buy an external hard drive, but at the moment I only have 5.8Mb available on my hard drive. I'm told that with this little space I will be unable to rebuild my Desktop, and my System could possibly crash. Is this true? Should I go into a deleting frenzy?
3. Do you know a contact address for Apple in New Zealand?
4. If I made a good document using ButtonTalk *on the* MACFORMAT *29 Cover*

Continued on next page

TROUBLESHOOTING KEYSTROKES

This issue we take a quick glimpse at power keys – keyboard shortcuts that save you having to drag your rodent all the way to the menu bar. These work in nearly all applications, including the Finder.

Command	Keystroke	
Clear	[delete]	
Close file/window	[command] [W]	
Copy	[command] [C]	
Cut	[command] [X]	
Duplicate	[command] [D]	
Find... file/keyword	[command] [F]	
Make alias	[command] [M]	Finder only
New file/folder	[command] [N]	
Open file	[command] [O]	
Paste	[command] [V]	
Print file/window	[command] [P]	
Quit	[command] [Q]	Application only
Save file	[command] [S]	Application only
Select All	[command] [A]	
Undo	[command] [Z]	

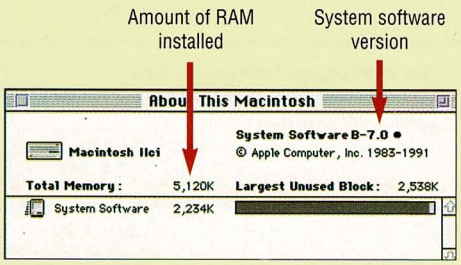


The do-it-yourself problem solving guide...

One of the most common causes of problems on the Mac are Extensions or Control Panels clashing in your System Folder. It's easy to check if this is the case. Restart your Mac and hold down **[shift]**. Release the key when you get the message, 'Welcome to Macintosh. Extensions off.' If everything works, then the problem lies in your System Folder. The only way to work out which item is the culprit is by trial and error. Remove a few Extensions and/or Control Panels, then restart your Mac, without holding **[shift]** down. Keep on doing this until the problem no longer occurs and you've found the offending software.

If this doesn't work, try rebuilding your Desktop. Start up your Mac holding down **[command]** and **[option]**. You'll get a message asking if you want to rebuild the Desktop. Click **[OK]**, wait for it to finish rebuilding your Desktop, and see if this solves your problem.

If you're still stuck, use the form below to write to us. We'll need to know a few facts about your Mac, so when you're in the Finder, select About This Macintosh from the Apple Menu. The picture (left) shows what we need to know.



Coming soon: the Wacom Graphic ArtChisel.

Disk, is there a chance that you might put it on your Cover CD?
Max Smith, New Zealand, via e-mail

A1. It looks like you've been unlucky enough to get one of the few faulty Cover CDs that slip through the net every now and again. To get a replacement, send your faulty CD, a padded self-addressed envelope, and a description of the fault to: MACFORMAT CD returns, Future Publishing, Freepost (BS4900), Somerton, Somerset, TA11 6BR, UK (no matter which country you live in). And please accept our apologies.

2. As a general rule, you should always try to keep at least 10% of your hard disk free. This is partly because most programs write temporary scratch files to your hard disk to store bits of information that won't all fit in memory. It is possible that if an application can't find any free space on the disk, it could quit unexpectedly – but it would need to be exceptional to hang your Mac.

Keeping a fair degree of space on your hard disk also helps reduce the effect of disk fragmentation. The System also needs plenty of disk space for its Desktop files, but rebuilding them (by holding down **[command]** and **[option]** during startup) shouldn't make your Mac crash. It should, in fact, free up a bit of disk space – the reason being that the Mac records every file that it ever comes across in the Desktop files, and after a while they get pretty big. Rebuilding the Desktop forces the Mac to go through the hard disk and catalogue the contents. Any files that you have deleted are not included, hence the Desktop files actually shrink, leaving more disk space for you to use. If you don't rebuild the Desktop, your Mac will keep adding data to it until there is no more disk space, then crash. But 5.8Mb of disk space really isn't a lot, so turn to page 59 for a complete round-up of the storage options available to you.

3. What do you think this is, International Directory Enquiries? Apple don't actually have an office in New Zealand, but they do have a distributor. Contact CED Distributions Ltd, 7 College Hill, Ponsonby, Auckland 2, New Zealand, or phone them on (0064) 9 309 9930.

4. Well, we have to keep our standards, of course, but we'll see what we can do. Seriously, we value reader contributions above all else, so keep 'em coming. Send your disks to: The Disk Editor, MACFORMAT, Future Publishing, 30 Monmouth Street, Bath, BA1 2BW. But please, no more National Lottery programs... **MF**

If you send in a question for the MACFORMAT experts to solve, please fill in and include this form (or a copy of it). And please make sure that you include all the relevant details – version numbers of software and so on – so that we have the best chance of helping you. Send your form and question to: MacAnswers, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW or fax it to us on 01225 446019.

Name .....

Address .....

.....

.....

.....

Your Mac
(For example, Performa 200, IIfx, PowerBook 145):

.....

System version
(see **About This Macintosh** screenshot above): .....

Amount of RAM
(see **About This Macintosh** screenshot above): .....

Are you using Virtual Memory? ..... **YES/NO**
(This is accessed from the Memory Control Panel under System 7)

Do you have 32-bit addressing turned on? ..... **YES/NO**
(This is accessed from the Memory Control Panel under System 7)

Details of any relevant hardware which could help us to answer your question:

.....

.....

Now, use this space to describe your problem or question. Please include as much relevant information as possible, and continue on a separate sheet if necessary.

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CUSTOMER CARE

12 MONTHS SWAPOUT ON DATA STORAGE DEVICES

HARD DRIVES
OPTICAL DRIVES
SYQUEST DRIVES
TAPE DRIVES

If you experience a product failure within 12 months of the purchase date, Technology Matrix will replace the faulty product from stock.
Subject to availability

Technology Matrix

Authorised Reseller

All prices exclude VAT & carriage. Prices & specifications may change without notice. E.& O.E.

CUSTOMER SERVICE

It costs six times more to attract a new costomer than it does to keep an existing one.

A typical disatisfied customer wil tell 8 - 10 people about their problem.

Seven of ten complaining cutomers will do business with you again if you resolve the complaint in their favour.

If you resolve a complaint on the spot 95% will do business again.

Of those customers who quit, 69% do so because of an atttiude of indiference by the company or a specific individual

In conclusion..... we are saying that we know the level of services that you expect from us !

One Stop Storage

HARD DRIVES

SIZE	INT	EXT
540MB	£125	£169
1.0GB	£189	£235
2.0GB	£479	£525
4.0GB	£719	£765
8.0GB	Call	Call
2.0GB AV	Call	Call
4.0GB AV	Call	Call

SYQUEST DRIVES

SIZE	DRIVE	CART
200MB Ext.	£299	£49
270MB Ext.	£259	£39
135MB Ext.	Call	Call

OPTICAL DRIVES

SIZE	DRIVE	CART
230MB Ext.	£345	£14
1.3 GB Ext.	£1199	£69

CD WRITERS

Plasmon	£899
Includes Software & Cables	
Philips CDD522 x2	£Call
Richo RS1060 x2	£Call
Yamaha CDR100e x4	£Call

CD-ROM DRIVES

NEC Quad Speed	£179
Apple CD 600e	£289

TAPE DRIVES

Exabyte 4MM DAT Drives	
4.0 GB Ext.	£Call
4-16 GB Ext.	£Call
Exabyte 8MM DAT Drives	
7-14 GB Ext.	£1495
HP 4MM DAT Drives	
4.0 GB Ext.	£595
4-16 GB Ext.	£749
Sony 4MM DAT Drives	
4.0 GB Ext.	£629
4-16 GB Ext.	£695

MEMORY MEMORY

4MB 72 Pin SIMM	£79
8MB 72 Pin SIMM	£149
16MB 72 Pin SIMM	£299
32MB 72 Pin SIMM	£599
4MB DIMM	£109
8MB DIMM	£189
16MB DIMM	£375
32MB DIMM	£729

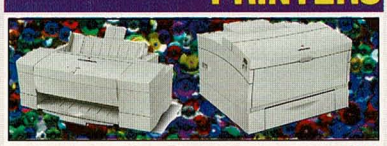
MONITORS MONITORS

Apple	
14" Apple Colour Display	£259
14" Apple Audio Vision Colour	£315
15" Apple Multiscan Display	£275
17" Apple Multiscan Display	£615
20" Apple Multiscan Display	£1410
liyama (IDEK)	
17" liyama VisionMaster 8617e	£519
17" liyama VisionMaster 9017e	£579
21" liyama VisionMaster 8221e	£1165
21" liyama VisionMaster 9021e	£1250

SCANNERS SCANNERS

AGFA StudioScan (Photo. Lite)	£468
AGFA StudioScan (Photo. Full)	£595
Apple Colour one Scanner	£Call
Canon IX-4015 (OFOTO S/Ware)	£599
Epson GTx 8500 (Photo. Lite)	£569
Epson GTi 8500 (Photo. Full)	£569
Epson GTx 9000 (Photo. Lite)	£779
Epson GTx 9000 (Photo. Full)	£849
UMAX Vista T630 (Photo. Lite)	£299
UMAX Vista S8 (Photo. Lite)	£539
UMAX Vista S8 (Photo. Lite)	£639

PRINTERS PRINTERS



Apple StyleWriter 1200 Mono	£197
Apple StylwWriter 2400 Colour	£329
Apple LaserWriter 4/600 PS	£585
Apple LaserWriter 360 600dpi	£989
Apple LaserWriter 16/600PS	£1579
Apple Colour LaserWriter	£4725
HP 320 Mono 600x300dpi	£179
HP 660 Colour 600x300dpi	£265
HP LaserJet 5MP 600dpi	£785
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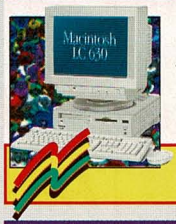
Lexmark 4079 Plus A3 Colour	£2399
TI MicroWriter PS23	£Call
TI MicroWriter 600	£Call

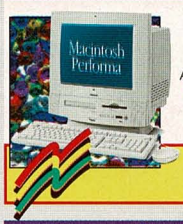
Performa 630+ 8/500/CD



Apple 15" Multiscan..
8Mb Ram.
500Mb HardDrive.
CD-ROM 300i+.
AppleDesign K/Board.
Mouse.
SoftWare Bundle.....
23 Titles including: -
System7.5. At Ease.
ClarisWorks 3.

£1059

Performa 5200/75 8/800/CD/Modem



.8Mb RAM
800Mb HardDrive.
CD-ROM 600i.
15" FST Display.
Speakers. Mouse.
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Software Bundle.....
23 Titles including: -
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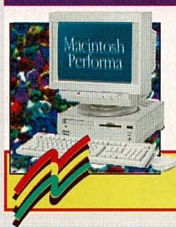

Apple 15" Multiscan..
8Mb Ram.
500Mb HardDrive.
CD-ROM 600i.
AppleDesign K/Board.
Mouse.
SoftWare Bundle.....
23 Titles including: -
System7.5. At Ease.
ClarisWorks 3.

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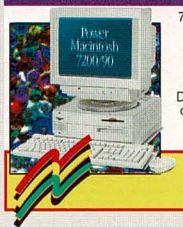
PowerMac 7200/75 8/500



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8Mb RAM.
1 Mb VRAM.
500Mb HardDrive..

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Don't forget to add the cost of a Monitor and Keyboard.

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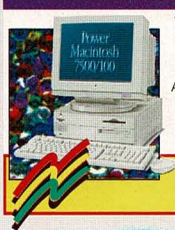
PowerMac 7500/100 8/500/CD



100MHz PowerPC 601.
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CPU only price.
Don't forget to add the cost of a Monitor and Keyboard.

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700Mb HardDrive.
9.5" Colour Matrix.
Mobility Bundle.
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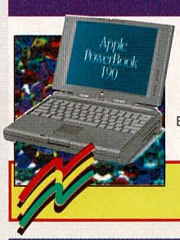
£2389

PowerBook 190 4/500



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500Mb HardDrive.
512k VRAM.
9.5" Greyscale Matrix.
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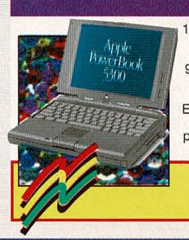
Mobility bundle.
Entertainment Software, Route 66 and ClarisWorks.

£1059

PowerBook 5300 8/500



100MHz PowerPC 603e
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500Mb HardDrive.
9.5" Greyscale Display.
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Mobility Bundle.
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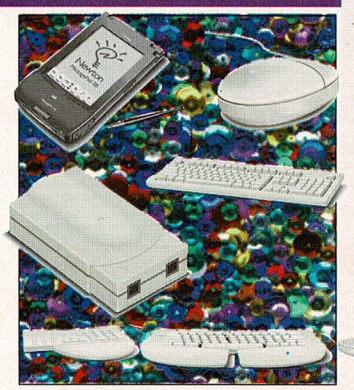

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Power Mac 9500/120 16/1000CD + 2Mb ATI Video Card	3242
Power Mac 9500/132 16/2000CD	3617
Power Mac 9500/132 16/2000CD + 2Mb ATI Video Card	3882
Power Mac 9500/132 16/2000CD + 4Mb ATI Video Card	3989
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Power Mac 7200/75 8/500 + Applevision 1705 display + Design keyboard	1306
Power Mac 7200/90 8/500CD + Applevision 1705 display + Design keyboard	1652
Power Mac 7200/90 16/1000CD + Applevision 1705 display + Design keyboard	2018

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Performa 630 8/500 CD Plus II	8	500	keyboard	780
Performa 630 8/500 CD Plus II	8	500	Multiscan 15" display & keyboard	1037
Performa 630 12/500 CD DOS	12	500	DOS Compatibility card, DOS 6.22, Windows 3.11 & k/b	958
Performa 630 12/500 CD DOS	12	500	DOS Compatibility card + 14" display & keyboard	1154
Performa 630 12/500 CD DOS	12	500	DOS Compatibility card + Multiscan 14" display & keyboard	1160
Performa 630 12/500 CD DOS	12	500	DOS Compatibility card + Multiscan 15" display & keyboard	1191

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Mac Bundle	RAM	HD	Bundle includes	
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Performa 6200 8/500 CD Plus II	8	500	Video-in-TV, keyboard	1036
Performa 6200 8/800 CD M Plus II	8	800	Modem & keyboard	1078
Performa 6200 8/500 CD Plus II	8	500	Multiscan 15" display & keyboard	1162
Performa 6200 8/500 CD Plus II	8	500	Video-in-TV, Multiscan 15" display & keyboard	1248
Performa 6200 8/800 CD M Plus II	8	800	Modem Multiscan 15" display & keyboard	1315
Performa 5200 8/800 CD Plus II	8	800	Built in 15" display & keyboard	1232
Performa 5200 8/800 CD M Plus II	8	800	Modem, Built in 15" display & keyboard	1384
Performa 5200 8/800 CD M Plus II	8	800	Modem, Video-in-TV, Built in 15" display & keyboard	1438
Performa 5300 16/2000 CD M Plus II	16	2000	Modem, Video-in-TV, MPEG, Built in 15" display & k/d	1932

Plus II bundles include the folowing software

Installed Solution Software - At Ease, Mavis Beacon Teaches Typing, Claris Works 3.0 Milie's Math House, ClickArt, Perfoma 7.5 System Software, eWorld, SpinDoctor, Hypercard Player, SuperMaze Wars, MacGallery, Thinkin'Things 2.

Included CDROM Software - Asterix Language, Rediex, Concertware, Rock Rap & Roll, Dorling Kindersley 'The Way Things Work', Snoopy CD, EA 3D Atlas, Daedelus Encounter, Grolier's Encyclopaedia, Making Music CD, Myst.

In adition, modem equipped configurations ship with 'Personal Communications Solution', and TV configuations are supplied with 'Avid Videoshop' and Apple VideoPlayer'.

The Perfoma 5300 MPEG machine also comes with bur MPEG CD titles

Ocean Life Hawaii, Return to Zork, Warren Miller, Wild Africa.

ACCESSORIES

Design Keyboard	74	Performa Video-in card	85
Extended Keyboard	128	Performa Video-in-TV card	215
Adjustable Keyboard	148	Performa Presentation kit (Video Out)	199
Desktop II Mouse	35	Power Mac Upgrade Card	545
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Design Speakers II	46	MIDI Interface	53

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Powerbook 190	8	500	66MHz LC040	9.5" GS PM	1174
Powerbook 190cs	4	500	66MHz LC040	10.4 PM	1344
Powerbook 190cs	8	500	66MHz LC040	10.4 PM	1493
Powerbook 5300	8	500	100MHz 603e	9.5 GS PM	1403
Powerbook 5300c	8	500	100MHz 603e	10.4 AM	2338
Powerbook 5300cs	8	500	100MHz 603e	10.4 PM	1769
Powerbook 5300c	16	750	100MHz 603e	10.4 AM	2848
Powerbook 5300cs	16	750	100MHz 603e	10.4 AM	2216
Powerbook 5300ce	32	1100	117MHz 603e	10.4 AM	4336
Powerbook 5300c Powerport Plat Modem	8	500	100MHz 603e	10.4 AM	2657
Powerbook 5300c Powerport Plat Modem	16	750	100MHz 603e	10.4 AM	3167
Powerbook 5300cs Powerport Plat Modem	16	750	100MHz 603e	10.4 PM	2535
Powerbook 5300cs Powerport Plat Modem	8	500	100MHz 603e	10.4 PM	2088
Powerbook Duo 2300c	8	750	100MHz 603e	9.5 AM	2272
Powerbook Duo 2300c	20	1100	100MHz 603e	9.5 AM	2972

Key: GS = Greyscale, PM = Passive Matrix, AM = Active Matrix

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Powerbook 190/5300 AC adaptor	39	Powerbook Duo AC Adaptor	45
Powerbook Type II/Type III Battery	85	Powerbook External 1.44Mb drive	95
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Group 3	Performas, Powerbooks (except 5300), LaserWriter 16/600 Monitors over 16",	15	99	165
Group 4	PowerMacs, Workgroup Servers, Colour LaserWriters	15	135	220

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Powerbook Duo, 150	149	249		
Powerbook 190, 5300		279	505	899

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Laserwriter Select 300/310	65		165			
Laserwriter 16/600			145		260	520
Laserwriter Pro 630			150			

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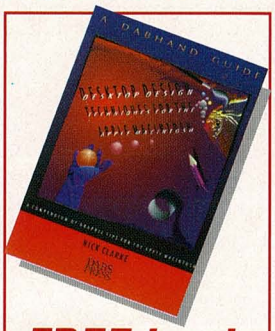
	15	25	65	120

Secondary Cache Memory	256k	512k	1Mb
PowerMac 6100/7100/8100	105	199	385
PowerMac 7200/7500/8500/9500	95	160	410



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Powercache 40MHz No CoPro SE/30	117
Powercache 40MHz & CoPro	129
Powercache 40MHz, CoPro SE/30	129
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A3 Electrostatic	618	A2	1339

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SCSI HC50 Micro D - HC50 Micro D		29	39
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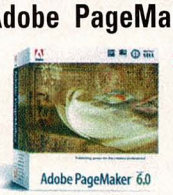

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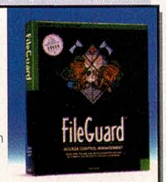

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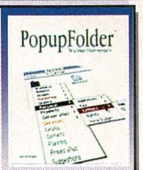

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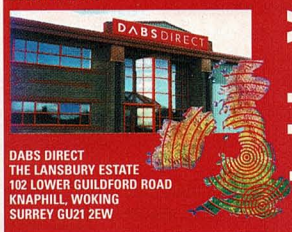

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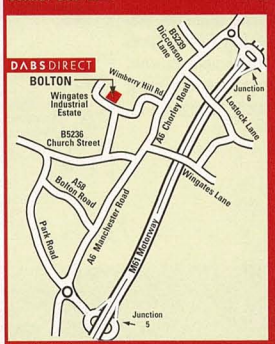

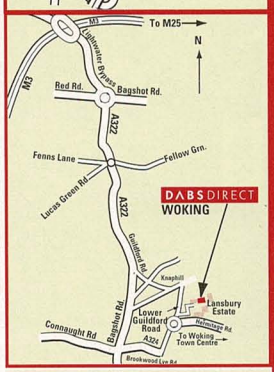

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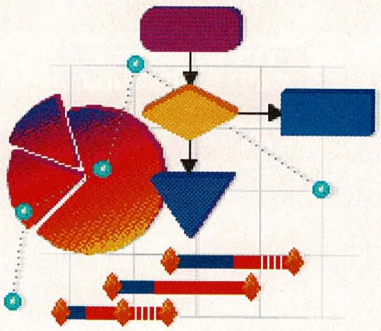
ClarisImpact 2



Conveying information in charts, tables and diagrams can make it much more understandable. Rod Lawton creates slick presentations with *ClarisImpact*.

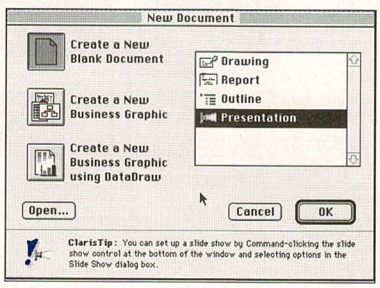
SON OF PAGEMAKER

ClarisImpact handles linked text boxes just like *PageMaker* – you pick up overflowing text with the cursor and place it as the next text block, carrying on until all the text is used up. Resize individual boxes and the text reflows automatically.

ClarisImpact is a presentation tool that doesn't really fit into the usual categories. It's designed to help you convey information graphically, cohesively and attractively. It's similar to *ClarisWorks*, but with a different slant. In theory, you can produce the same documents in *ClarisWorks* as you can in *ClarisImpact* – all the raw tools are there – but *ClarisImpact* has been designed specifically for business graphics presentation, so the result is more polished and easier to achieve.

Document types

There are four different types of document you can create using *ClarisImpact*:


New Document
Create a New Blank Document
Create a New Business Graphic
Create a New Business Graphic using DataDraw
Drawing
Report
Outline
Presentation
Open...
Cancel
OK
ClarisTip: You can set up a slide show by Command-clicking the slide show control at the bottom of the window and selecting options in the Slide Show dialog box.

With four document types and six special business graphics, you can use *ClarisImpact* to create custom presentations for almost every business use.

drawing, report, outline and presentation documents.

Drawing documents are useful for combining text, graphics and business graphics. If you've used the drawing module in *ClarisWorks* – or any Mac drawing package – you'll be familiar with the tools. You can create linked text boxes, so it's easy to create layouts where the text flows in either regular or irregular columns – a surprisingly powerful feature.

Report documents are used for text-based documents. This is really a word-processing module, but you can slot in graphics and independent text labels too.

Outline documents are useful for brainstorming ideas or developing plans and organisational structures. It's unusual to see an outline module on its own – you usually see them successfully integrated with word processing functions. It is possible, though, to convert *ClarisImpact* outlines into plain text and organisational charts.

Finally, the presentation documents are effectively slideshows. You can create a 'master slide' layout so that the background to your slides is constant, and from there you can add text and graphics to individual slides. They can be viewed as thumbnails, and re-ordered and edited at will to produce slick presentations.

Business graphics

These four document types are only part of the story, though, because *ClarisImpact* also provides six different types of business graphics: organisation charts, tables, flowcharts, data charts, timelines, and calendars. These can be inserted into any of the document types, and each graphic remains live once it's been placed on a page, so it can still be edited.

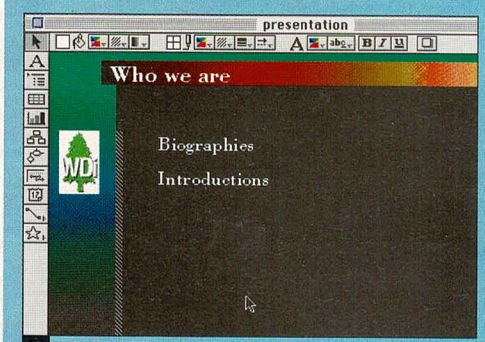
Organisation charts are handy for showing any kind of hierarchy or creating outlines for an idea, plan or structure. A typical use could be to indicate the various levels of management within a company. You create an organisation chart by choosing the appropriate tool in the toolbar and then clicking in your document. Once you've selected the chart to make it active, you get a new set of tools and menu commands for adding boxes, changing the structure and writing text in the boxes. It's very slick and very quick.

Tables work in the same way – you select the table tool, then click in your document and type text and numbers straight in. You can also add spreadsheet-style formulae for sub-totals and other more complex calculations.

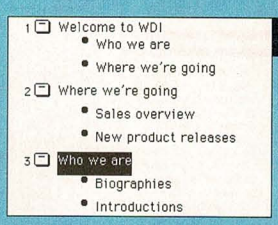
Flowcharts are excellent for planning in general as well as programming. They help clarify complex processes and make it easier to spot critical paths, opportunities for time-phasing and potential bottlenecks. Like organisational charts, they're incredibly easy to create – select the shape you want in the Shapes palette and drag out a link from any of the boxes. Once the boxes are linked, they stay linked, even when you move them around.

Data charts are a variation on the sort of charting features you tend to get with spreadsheets, but a couple of new slants have been added. When you add a chart graphic to a document, you can either link it to a table in the same document or make it an independent chart with its own table of data. If you link it to a table, changing the data in the table changes the chart. If you make it independent, clicking on an icon pops up a small

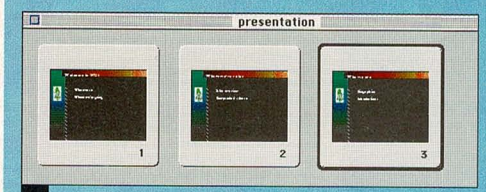
MAKING THE RIGHT IMPRESSION



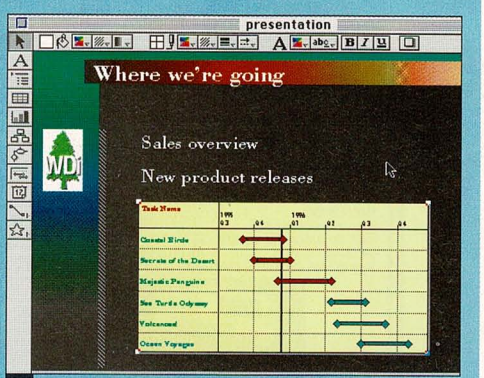
1 Using master slide designs, you can create a cohesive look for your whole presentation. *ClarisImpact* even offers you a choice of co-ordinated colour schemes.



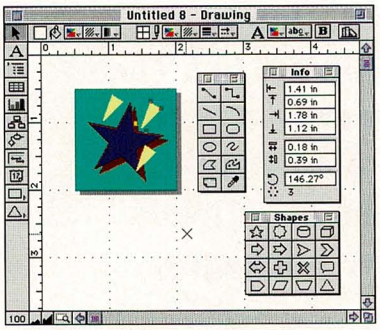
2 Planning your slideshow might be easier if it's viewed as an outline. Here, each slide title is shown as a main topic, and the sub-topics are the sub-headings on the slides.



3 If you want a graphical representation of your slideshow, you can view the slides as a series of thumbnails. You can change their order here, too.



4 Slides can contain business graphics, just like the other document types. This one contains a table which you can edit live – it's not simply linked to another document.



Drawing documents in *ClarisImpact* works like all Mac drawing applications. You can link text boxes to produce quite sophisticated DTP layouts.

table containing the data upon which your chart is based.

Timelines are very useful for scheduling and planning. In *ClarisImpact* they're created as Gantt charts, where the display is split between tabulated data (job name, start date, duration, final deadline and so on) and the graphical display itself. Although these look good, unfortunately Gantt charts really aren't the ideal planning format – you can make one job dependent on the completion of another, but it has to follow directly on from it in the list, which means that Gantt charts are not the best tool for co-ordinating jobs that need to be done in parallel, particularly as you can't make two parallel tasks dependent on the completion of another.

Lastly, calendars can be weekly, monthly or yearly, to which you can add notes, holidays, appointments and so forth. These could be useful as personal organisers, but there are applications on the market that do this much more effectively. As part of a presentation document, though, these calendars can be extremely useful for conveying information.

Linking

The strength of *ClarisImpact* is not just in the types of document it can create and the range of specialist business graphics available, but in the way these can be interlinked.

Slideshows, for example, can be viewed and edited in a text-based outline format. Text outlines can be converted into organisation charts, and text-based data files (the sort produced by any database application) can be imported into charts, timelines and tables. Indeed, the permutations are too numerous to list and they're all backed up by the supremely flexible document format. Quite simply, any number of the business graphics can be placed in 'frames' in any of the document types.

As if that wasn't enough, there is one more big gun in *ClarisImpact's* arsenal. It's a tool for designing professional and slick-looking presentations, and it provides a whole range of preset 'styles' for your documents and graphics. These go beyond mere text stylesheets, including whole colour schemes and layout styles. This means that if you create a presentation using six different types of business graphic, they can all be unified by a single, cohesive look.

ClarisImpact is designed to convey information in a dynamic, attractive and informative fashion, and it achieves this extremely well. It offers complete creative control, if you want it, but it also provides a range of custom solutions, most of which will be ideal for most people, most of the time. You don't need to be a designer, a spreadsheet expert or a database administrator. You don't need to set aside weeks of planning and development time to produce your reports and presentations, and you barely need to set aside a day to learn how to use 90% of *ClarisImpact's* features.

If you're developing proposals and presentations for multinational corporations, you probably need professional designers and some heavyweight data analysts and statisticians. But for personal use, such as making presentations within your company, or for any small-to-medium-sized businesses hoping to impress backers, *ClarisImpact* has power, style and flexibility. **MF**

CLARISIMPACT 2

Price: £129. **Out:** now.
Requires: any Mac, 8Mb of RAM, System 6.0.8 or later.
Contact: Claris on 0181 756 0101.

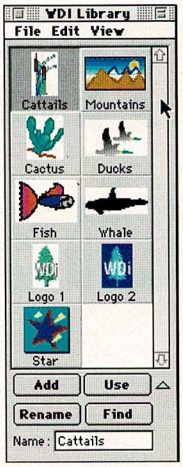
FEATURES 88%
The overall package is fast, efficient and well integrated.

EASE OF USE 92%
Puts professional presentations easily within the scope of beginners.

DOCUMENTATION 81%
Very clear, concise and friendly, but it could use more in-depth help.

VALUE FOR MONEY 85%
Not exactly a bargain, but much cheaper than professional design and presentation software.

MACFORMAT RATING 86%

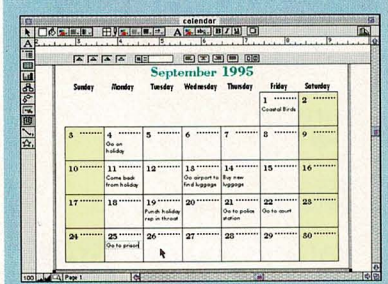


Haven't got the time or skills to produce illustrations for all of your documents? *ClarisImpact* offers you libraries of ready-to-use clip art.

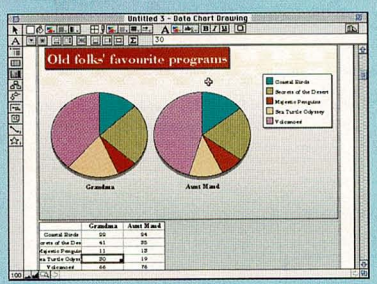
FAMILIAR TERRITORY

If you know your way around *ClarisWorks*, *ClarisImpact* will be easy to pick up – some of the modules have more than a passing similarity.

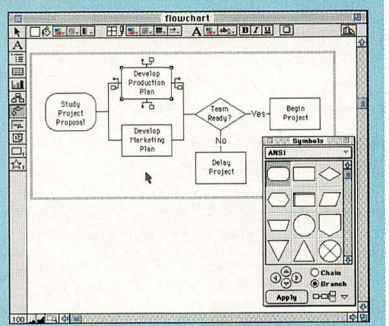
EMBEDDING GRAPHICS



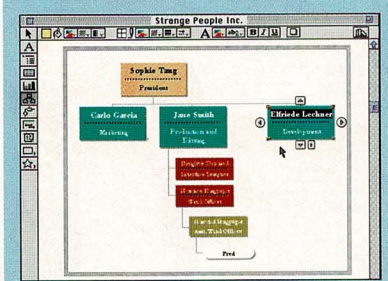
Calendars can display weeks, months or years and can be annotated. You can import calendar data using the Datadraw import dialogue.



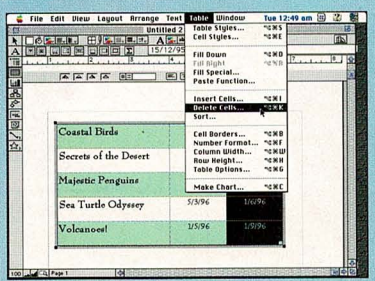
You can create pie charts, scatter charts, bar graphs, or almost any other type. Enter data in a pop-up table, or link to a separate table.



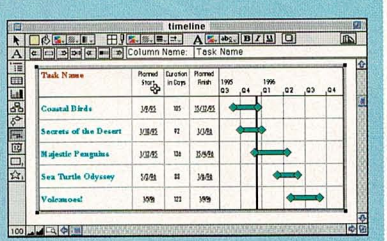
Flowcharts are good for program planning – in fact, they're excellent for any sort of planning, from developing processes to brainstorming.



Organisation charts have more uses than just showing company structures. Easy-to-follow icons make chart creating fast and simple.



Tables use is similar to spreadsheets, with many of the same functions and operations. Tables can also be linked to charts in the same document.



Timelines are useful for displaying sets of tasks over a period of time, including start and end points, duration, milestones and more.

IN THE SHADOWS

You can quickly add drop shadows to many *ClarisImpact* graphics for extra finesse, and you can change the colour and offset of the shadows, too.

USE YOUR LIBRARY

ClarisImpact libraries can store both text and graphics. The tutorials are also written as libraries, which means you can use them as floating palettes while you follow their instructions.

The eye of the beholder

When presentation is all-important, clip art is a cheap and cost-effective way to brighten up a document. Alistair Dabbs artistically appraises five packages.

CLICKART FAMOUS MAGAZINE CARTOONS 2

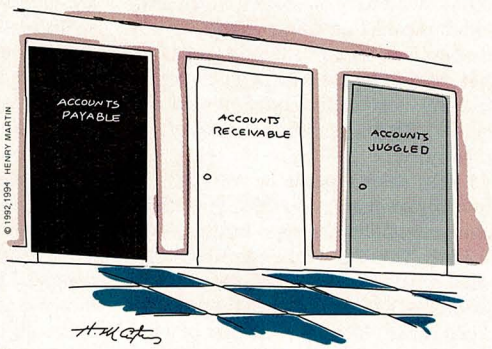
MACFORMAT Classic

Taking an original approach to clip art, *ClickART Famous Magazine Cartoons 2* contains the work of nine 'famous' American cartoonists. Although you're unlikely to have heard of the cartoonists, this is classy stuff – full of satire and fresh ideas. The bulk of the 500 images are in black and white, with only about 100 in colour, but this isn't such a disadvantage – it makes them perfect for club newsletters, in-house brochures or handouts.

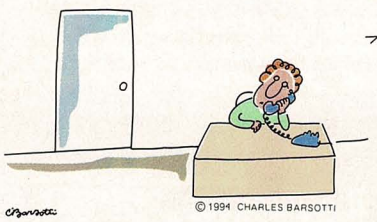
Most unusually, the cartoons are supplied in *Adobe Illustrator* EPS vector format. Each cartoon has been scanned in from the original, auto-traced (nicely done, too) and a curves-only text caption added underneath. This means that the cartoons – which you'd usually expect to be in jaggy bitmap format – can actually be scaled up or down indefinitely without losing definition.

If you can't accommodate EPS files, the CD includes Brøderbund's fast *Image Exporter* for resaving the cartoons as bitmap PICTs. And the entire CD can be browsed and images previewed with their *Kudos Image Browser* – supplied.

This is a cracker of a clip art collection. With syndicated cartoons costing thousands of pounds, the offer of 500 on one royalty-free CD for £30 is too good to pass up.



"If I catch the person who keeps mumbling 'Is this fair to the stockholders?' they're out of here."



"Could he call you back? He was shot down in flames at the directors' meeting and he's meditating."

FAMOUS CARTOONS

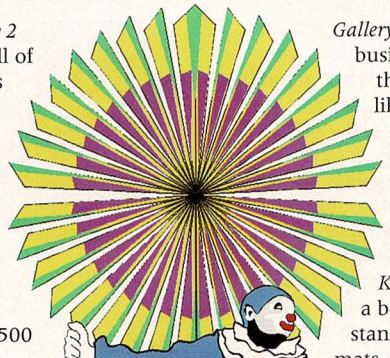
Disk format: one CD-ROM.
No of images: 500.
Image formats: EPS vector, *Adobe Illustrator '88*, PICT, TIFF.
Price: £29.38.
Contact: MacLine on 0181 401 1111.

MACFORMAT RATING 90%

COMBINATION TELEPHONE, ANSWERING MACHINE, ONE-TOUCH DIALER, AND PAIN IN THE NECK
DO YOU REALIZE THAT'S YOUR FOURTH CUP OF COFFEE THIS MORNING?
© 1993,1994 CHARLES BARSOTTI

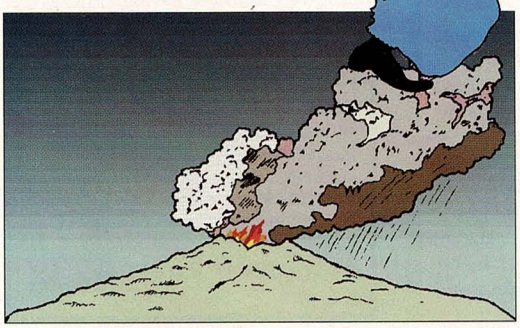
"It's his creative time."

COREL GALLERY 2

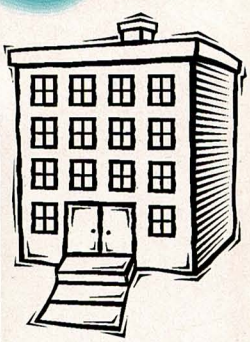


Corel Gallery 2 contains all of the images and features from the original collection plus a barrel-load of extras – and all on one CD. It's also something of a multimedia collection, with not only 15,000 images and 500 fonts, but 75 sound clips, 10 QuickTime movies and *MasterJuggler* – a handy resource and applications manager.

The presentation-style sounds and movies add to the impression that *Corel Gallery 2* is targeted at business users, rather than home users (unlike the *ClickART Image Pak*). The *Gallery* browser is much less intuitive than *ClickART's Kudos*, requiring a better understanding of file formats. You can't use images straight off the CD; you have to convert them to something else first.



The images are detailed, and include useful categories such as road signs and medical drawings. This makes up for the embarrassingly bad but immense collection of portraits of famous people, not to mention the disconcerting 8.3 DOS format of all the filenames. At this price it may be worthwhile for business documents or presentations.



COREL GALLERY 2

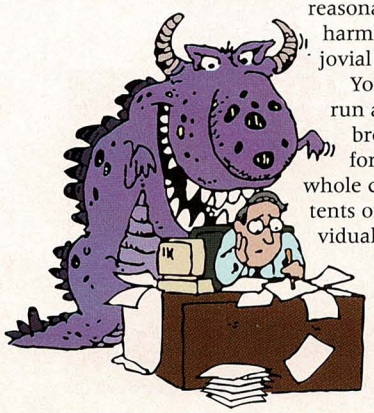
Disk format: one CD-ROM.
No of images: 15,000.
Image formats: CMX interchange format – Scripts to convert to EPS, PICT, TIFF, GIF.
Price: £92.83.
Contact: Channel Market Makers on 01703 814142.

MACFORMAT RATING 80%

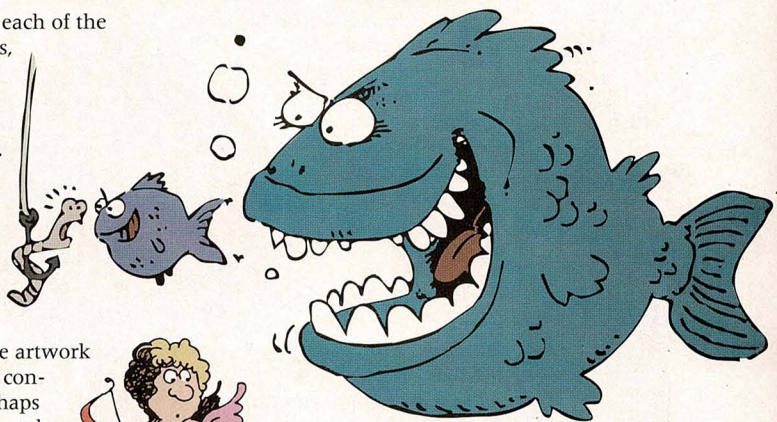
CLICKART CARTOONS FUN 5 PAK

This more standard batch of illustrative stock cartoons comprises five volumes of the *ClickART Cartoons* series: Beastly Funnies, Bulletins & Newsletters, Company & Business, Parties & Events, and On The Job. As far as value for money goes, it's a great buy.

The collection is mainly made up of comic-style people looking happy, sad, jumping around and so on. There are the usual stereotypes too: overworked secretaries typing; bald bosses fuming; golfers in silly clothes... It's all reasonably harmless, jovial stuff.



You can run a browser for the whole contents or individual browsers for each of the five volumes, plus one specifically for the 61 colour images. All of the images are in EPS format with a PICT converter. The 122 cartoon-style TrueType fonts are a generous if excessive inclusion.



The quality of the artwork is high, scanned in from conventional artwork, but perhaps too 'hot-dang' American in style for some tastes. While they'd be fine for brightening up a First Aid manual or your kids' homework, you're not going to see many of them turning up in Liberal Party handouts.

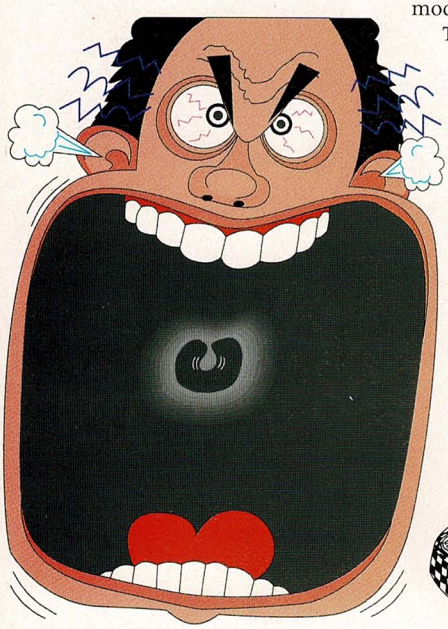
CARTOON FUN 5 PACK

Disk format: one CD-ROM.
No of images: 547.
Image formats: EPS vector, *Adobe Illustrator '88*, PICT, TIFF.
Price: £29.38.
Contact: MacLine on 0181 401 1111.

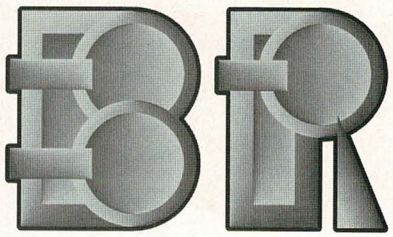
MACFORMAT RATING 75%

CLICKART INCREDIBLE 25,000 IMAGE PAK

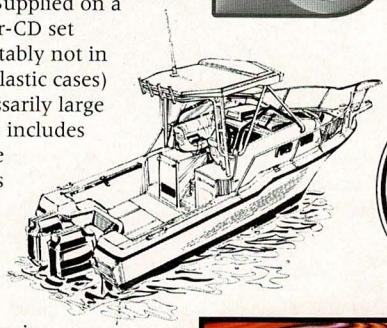
A selection of images from the *Incredible 25,000 Image Pak* are on the Cover CD

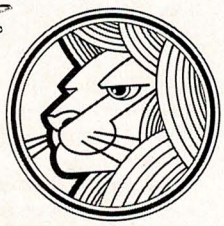


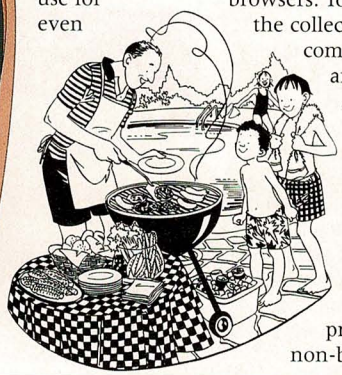
People who use a lot of clip art crave one thing: variety. Tired of using the same old 1950s pointy fingers and men in business suits, they need a constant source of new graphic material to illustrate and enliven their publications, no matter how modest. This is where compilation products like the *ClickART Incredible 25,000 Image Pak* come in. You probably won't find any use for even 1% of the images, no matter how long you keep this package for, but at least it gives you the choice – and you'll find about 50 alternative arrows to the standard pointy finger.



Supplied on a four-CD set (regrettably not in solid plastic cases) inside an unnecessarily large box, the package also includes a *Corel*-style 575-page visual index, which is a handy accompaniment to the categorised on-disk browsers. To say the collection is comprehensive is an understatement: chances are you'll never need another clip art CD again once you've got your copy of this – unless you have really specialised clip art needs. And to top it off, you get 1,000 free TrueType fonts. The only minor drawback is the price – which might put non-business users off.







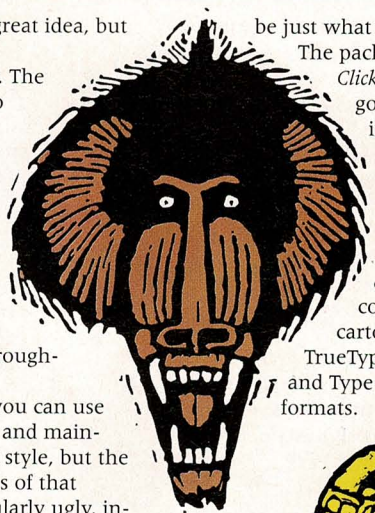
25,000 IMAGE PAK

Disk format: four CD-ROMs.
No of images: 25,000.
Image formats: EPS vector, *Adobe Illustrator '88*, PICT, TIFF.
Price: £46.99.
Contact: See Reader Offers on page 114.

MACFORMAT RATING **75%**

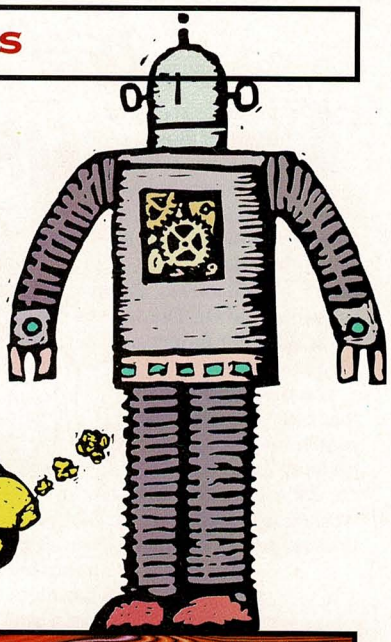
CLICKART ART PARTS

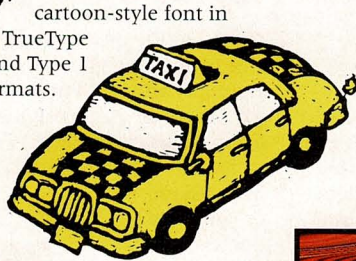
Art Parts is a great idea, but a wasted opportunity. The concept is to provide naturally-drawn clip images instead of sterile computerised ones, adding personality to whatever you're trying to spruce up. Unfortunately, it's the same personality throughout the CD.

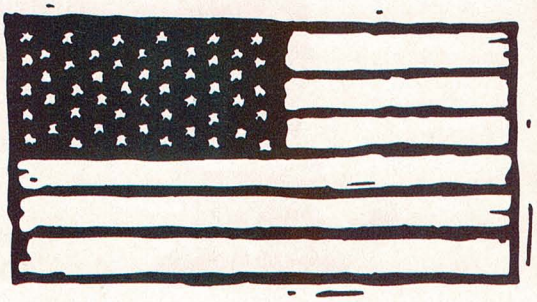


On the one hand, you can use scores of the images and maintain a consistency of style, but the artwork here is of that particularly ugly, infantile, woodcut style you see on the front cover of every business magazine in the States. It looks cheap and rather depressing, especially in black and white.

But it all comes down to personal taste. *Art Parts* might be just what you're looking for. The package is as slick as all *ClickART* titles, with a good range of topics, including all the usual categories of transport, holidays, people at work, and so on, plus the *Kudos Image Browser*, the EPS-to-PICT converter and a fun cartoon-style font in TrueType and Type 1 formats.







CLICKART ART PARTS

Disk format: one CD-ROM.
No of images: 422.
Image formats: EPS vector, *Adobe Illustrator '88*, PICT, TIFF.
Price: £29.38.
Contact: MacLine on 0181 401 1111.

MACFORMAT RATING **55%**

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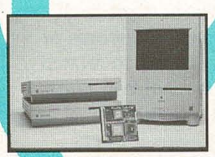

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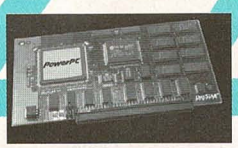

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Grolier 1996

It's packed with information, but how useful is it to you? Garrick Webster puts the latest multimedia encyclopaedia under the hammer of scrutiny...

WIRED

If you're on the Internet while you're using *Grolier*, you can exploit the disc's many built-in links to CompuServe forums and Internet sites. Whenever an article has a link to it, a green On-Line button appears in the bottom right corner of the screen. You need to have CompuServe access, though.

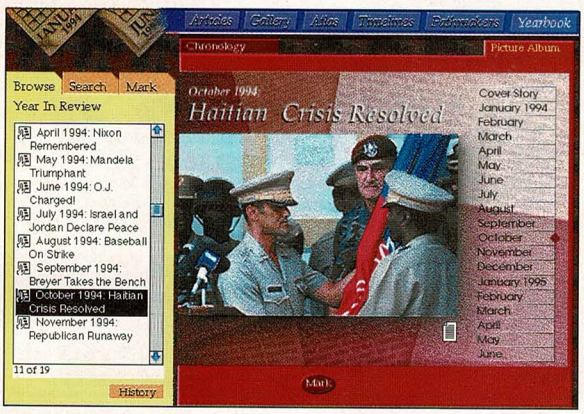
Grolier have been in the multimedia encyclopaedia business for a long time now. Bearing this in mind, the *1996 Grolier Multimedia Encyclopedia* is surprisingly difficult to navigate. *Grolier* uses a common interface throughout, but it looks dull and feels unresponsive.

Your immediate starting point, if you want to find something quickly, is usually the Articles section. Here you find the bulk of the encyclopaedia's text spread across some 32,000 articles. Type in a topic name at the top of the Browser box, and the encyclopaedia jumps automatically down to articles with your chosen word in their title. Otherwise, you can click the Search button to perform an and/or phrase search. You can bookmark entries, and all text can be cut and pasted out either to your own word processor or the one that comes built in. And if you find something useful you'd like to share with others, you can print things out for the noticeboard or wherever.

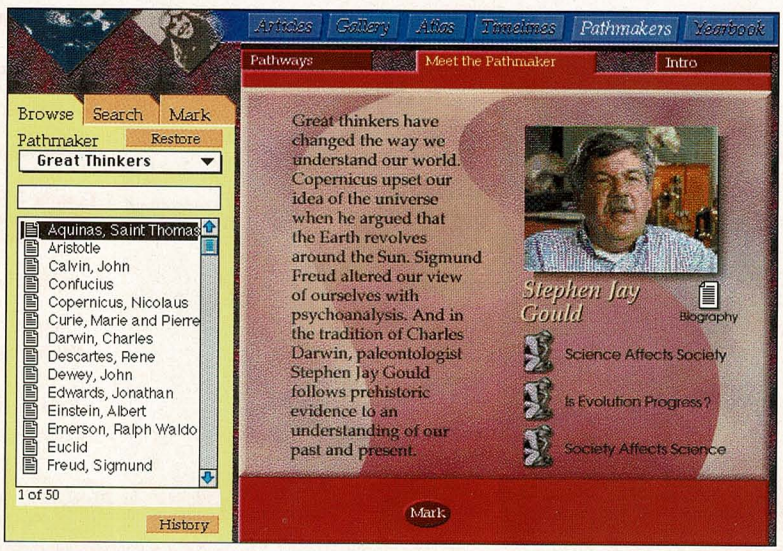
The other main hive of information on the disc is called The Gallery. Among its 8,000-odd entries you'll find virtually all the non-text media on the disc, including photos, multimedia slide shows, charts, sound clips and even synthesised piano renditions of a good number of the world's national anthems. But one of the big disappointments of *Grolier* is the lack of integration between the Articles and Gallery sections. Having browsed for something among the Articles and drawn a blank, it would be helpful to be given some indication that what you want is elsewhere on the disc.

The Browser and Search functions work inconsistently, too. Search on 'Oliver Cromwell' in the Articles section and it comes up with 'Cromwell, Oliver' and delivers over 600 words of text, a picture and four links to related topics like The English Civil War and British History. Search on 'Oliver North', and the first choice it offers you is 'moose'. Yep, you should have typed in 'North, Oliver'. It's these small and confusing inconsistencies that make it less intuitive than it could be. It can take three or four tries – switching between browsing and searching and between the Gallery and Articles – before you finally hit on what you want.

As a small compensation, *Grolier* has a Back button (as all multimedia resources should), enabling you to jump back through your enquiries. But it's called History, because it gives you a quick recent history of the articles or Gallery entries you've been looking at.

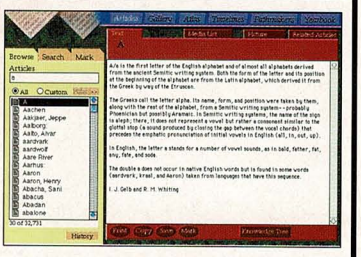


The yearbook tells you the Haitian crisis was resolved in October '94. And that's that.

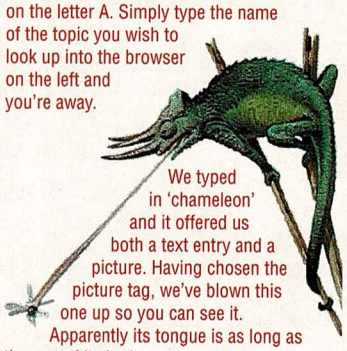


Stephen Jay Gould introduces the Pathfinders subsection on Great Thinkers with a short video comment. It's linked to 50 articles from Saint Thomas Aquinas to Mary Wollstonecraft.

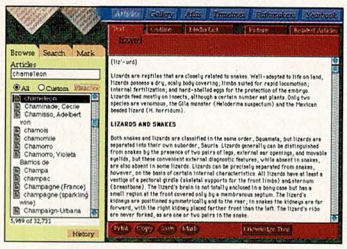
USING IT



When you start using *Grolier 1996*, you'll probably find yourself in the Articles section on the letter A. Simply type the name of the topic you wish to look up into the browser on the left and you're away.



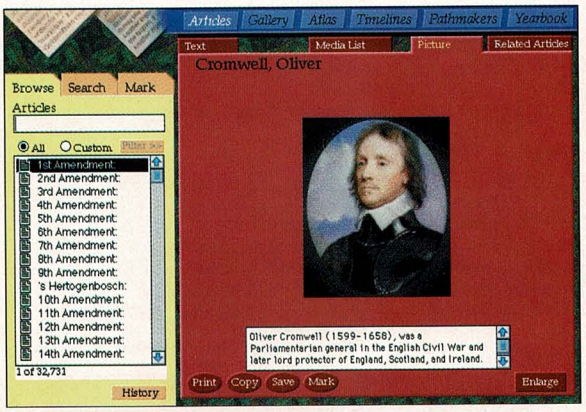
We typed in 'chameleon' and it offered us both a text entry and a picture. Having chosen the picture tag, we've blown this one up so you can see it. Apparently its tongue is as long as the rest of its body.



From the chameleon screen, pulling down the related topics menu takes us off to some text on lizards. Likewise, clicking the Knowledge Tree button at the bottom also shows some related topics in a tree/branch-like structure.

Instant access

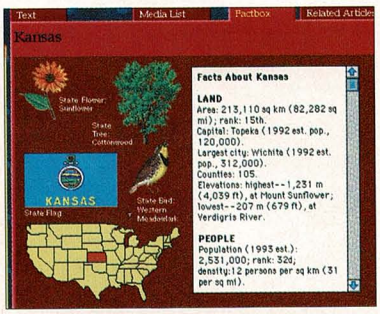
The other sections of the disc fare a little better, but only because they're more self-contained and interesting in themselves. The Atlas succeeds by leading you straight to the information quickly. Browse a place name like Cambodia or Kansas and you can jump straight to the maps. Your first sighting of these maps is unimpressive – they appear in tiny three by four inch boxes – but they can be enlarged to full screen size. Even better, you can also jump straight from places and landforms marked on the map to related information elsewhere in the encyclopaedia. So, from the map of Cambodia you can jump quickly to details on Phnom Penh or the Mekong River, while in Kansas there are links for Wichita and Kansas City. Meanwhile, you can go straight to the big entries on Cambodia or Kansas respectively, and access photos or other media from the Media File pull-down menu. This menu doesn't tell you what kind of media entry it is, though



Linked to the text file on Oliver Cromwell in the Articles section of the encyclopaedia, is a picture of the man that can be expanded. The browser, meanwhile, sits on the left of the screen ready to take you to other subjects, such as America's constitutional amendments.

The Timelines section of the disc takes a broadly historical approach and also tends to give away *Grolier's* apparent interest in the exploration of the New World.

Maps of all the countries, plus all the American states, can be expanded to full-screen size and explored with the mouse pointer. There is also a series of maps showing explorers' routes through Africa and the Americas.


Text
Media List
Factbox
Related Articles
Kansas
Facts About Kansas
LAND
Area: 213,110 sq km (82,282 sq mi); rank: 15th.
Capital: Topeka (1992 est. pop., 120,000).
Largest city: Wichita (1992 est. pop., 312,000).
Counties: 105.
Elevations: highest--1,231 m (4,039 ft), at Mount Sunflower; lowest--207 m (679 ft), at Verdigris River.
PEOPLE
Population (1993 est.): 2,531,000; rank: 32d; density: 12 persons per sq km (31 per sq mi).
KANSAS
State Flag
State Flower: Sunflower
State Tree: Cottonwood
State Bird: Western Meadowlark

Each major place has its own fact box with mini-map, flag and other bits and pieces. A scrolling text box conveys population, economic and political details. Kansas, the sunflower state, is a major place.

– music, text, video or picture, you just have to click to find out.

The Timelines section divides all of history into ten eras, beginning with Origins (100 million BC to 10,000 BC) and concluding with Towards a New Global Outlook (1994 to 1995 AD). Within each era historical threads are divided geographically and main articles are symbolised by little pictures. It's easy enough to use, but you can use a downward scrolling menu of dates instead, which takes forever.

Nowhere near as interesting or comprehensive is the Yearbook, where a postcard-size picture represents one main news story for each month between January 1994 and June 1995, with a short slide show on the front end. According to this, in June 1995 OJ was charged and nothing else happened. The Yearbook will probably occupy your mind for two minutes – less if you're fully conscious.

The Pathmakers section offers more value. It gives you access to articles falling into categories such as Sports Achievements, Great Thinkers, Innovators and Inventors, and The American Novel. Each sub-category gives you 50 articles, with links to other media. Tacked onto the front end is a short, stamp-sized video clip of an American expert giving a little spiel on the topic, plus three further soundclips – Buzz Aldrin does a talk about Explorers, while Helen Frankenthaler (who?) has a few comments about art.

The *1996 Grolier Multimedia Encyclopedia's* only great strength is that it contains a lot of information – but the more we tested its search capabilities, the more failings gnawed their way to the fore like hungry rodents. And while it fares well on the volume front, this information has a heavy American bias, which makes much of the information redundant to anyone outside the States and not sitting an American Studies degree. The State of Kansas, for instance, is afforded 3,220 words and includes such minutiae as the state bird, state flower and state tree, on top of the flag and the map, while the whole country of Cambodia only warrants 2,372 words, plus flag and anthem. Predictably enough, American football merits 2,664 words and 22 pictures, while soccer only gets 1,895. Aussie Rules footie receives no mention at all.

If you have a pressing need to discover more about the US of A, *Grolier* is a top choice. Its usefulness otherwise is marginal, and it's worth waiting to see what the 1996 versions of other CD encyclopaedias will have to offer. Think doubly hard before laying down the hard-earned for this one. **MF**

HOW MUCH IS ENOUGH?

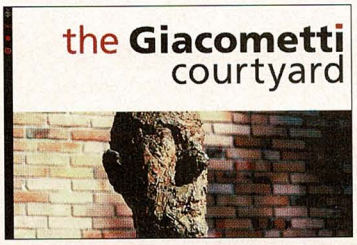
A search on H P Lovecraft gives you a 108-word biography of the writer, while chameleon comes with 218 words, one illustration and three related articles. Ear, however, is honoured with a 920 words, a narrated animation explaining it and nine related articles.

WHO TO BELIEVE

The Observer newspaper recently found the *1996 Grolier Multimedia Encyclopedia* to be the best of the lot.

MODERN ART

What might just make the *1996 Grolier* interesting to art lovers is the fact that it comes with a free CD-ROM on modern art. Featuring a huge collection of mainly impressionist and cubist paintings and sculptures, the disc is based on the Maeght Foundation. There's a 75-word glossary, some good video, bird sounds, and it includes works by the likes of Matisse, Braque and Miro, as well as a number of less well-known French artists. Unlike the *Grolier* itself, it's thoroughly un-American. Odd.



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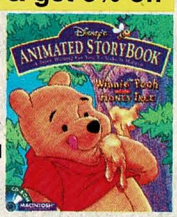

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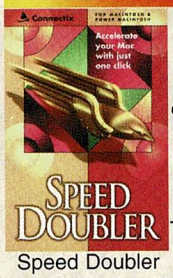

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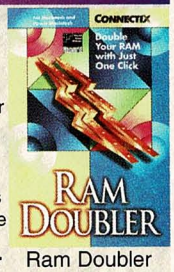

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Once upon a time...

The story is the blood that pulses throughout our society, entertaining and teaching as it unfolds. Once the province of the storyteller, stories are now told through mass-produced media like cinema and television. This break with tradition hasn't weakened the importance of storytelling; if anything it's more important to us now than ever.

CD-ROM is a break with the Hollywood-led trend of production line stories, because it revives an element of interaction between narrator and audience. With your Mac, you don't have to just sit and accept the tale; you can grasp it and change it, playing with its meaning.

Over the next seven pages, we look at a selection of CD-ROMs that use 1990s technology to offer a fresh look at folk and fairy tales. Some are stories that have been passed down through generations; others are brand new sagas that follow the conventions of storytelling tradition.

First you'll see multimedia that tells you a story, drawing you in with music, humour and animated dance. Although they are irrepressibly modern, with contemporary dialogue and songs, these discs perform the same function as the grandfather with a child on his knee, or the entertainer with a crowd grouped around a fire. They use multimedia to engage you in the story, encouraging you to become part of it by exploring the scenes that they display.

Imo and the King
Baba Yaga and the Magic Geese
The Little Samurai
Kiyeko and the Lost Night
The Selfish Giant
The Lion King

Then the idea of participation is extended as you become the storyteller. You can create your own tales on the Mac, using the material these discs provide.

What's My Story?
Storybook Weaver Deluxe
Story Artist Kit

Magic Tales

You can find interactive demos of all three of the *Magic Tales* on the Cover CD

Richard Hill takes you on a grand tour around the storytelling world with three CD-ROMs that bring favourite folk tales into the modern age.

You can visit any of the individual pages on each CD-ROM to find the secrets hidden inside.

Three traditional tales have been turned into *Magic Tales* – CD-ROMs that use animation to retell stories from around the world. Each follows a similar pattern, with narrator Grandpa Mouse settling down to tell the kids a favourite tale.

The tales last for 12 pages, each filled with hotspots you can click on to start off animations. You can choose whether to have the whole story read to you or to explore it yourself, taking the time to see what delights are hidden on each page.

Clicking on different objects sparks off animations, either entirely frivolous or adding to the storyline. The idea of hotspots hidden in storybook scenes is a standard part of all children's tales on CD-ROM. What are especially nice about the ones in the *Magic Tales* are their excellent quality – with comedy sequences and small song-and-dance routines hidden away – and their physicality. Often the actions in story CD-ROMs are like video loops – everything in the scene is reset to the way it started when the action has finished, a very artificial effect. But it's different here. For example: a street trader in *Imo and the King* is waving a rug with a bird design on it. When you click on it, the bird comes to life and flies away – and doesn't come back. If you click there again, you'll see a second sequence where the bird darts in to tease the trader before flying off again.

It's show-stopping entertainment all the way. There are no games or activities to have a go at and, more disappointingly, none of the discs goes beyond the tale itself to offer background information on the culture the story came from. A slim illustrated book of the story, which will help children learning to read, comes with each disc to add educational muscle.

Despite these shortcomings, it's the attention to detail – the intricate sequences, the variety of songs and the way they contribute to the story – that makes these discs some of the best you'll find.

The kindly Grandpa Mouse always has an interesting yarn to tell his grandchildren in the *Magic Tales* series of CD-ROMs.

Imo and the King

Imo is an exuberant morality play with a clear message: that one good turn deserves another. The villagers laugh at young Imo when he decides to accept the King's three challenges to become prince, but through simple acts of kindness he gains a few helpful friends on his journey.

The story has the simple structure of many a folk tale, but the presentation is far more sophisticated than your old-fashioned storybooks. A riot of colour and movement whisks you through the pages, and with the huge variety of musical styles and the reassuring familiarity of the plot leading to a strong ending, *Imo* is the most fun you'll have out of the three *Magic Tales* that are on offer.

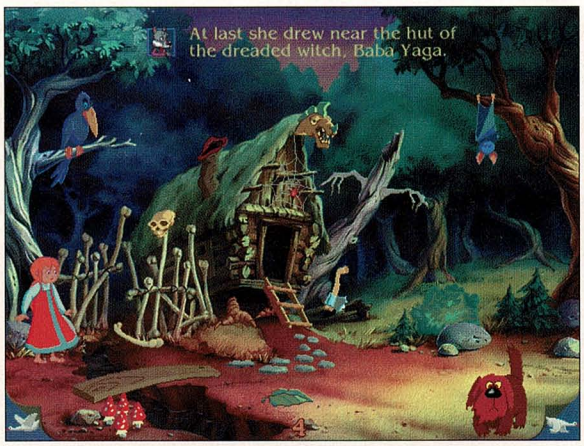
Baba Yaga

If *Baba Yaga and the Magic Geese* has a moral, it's this: never leave your baby

IMO AND THE KING

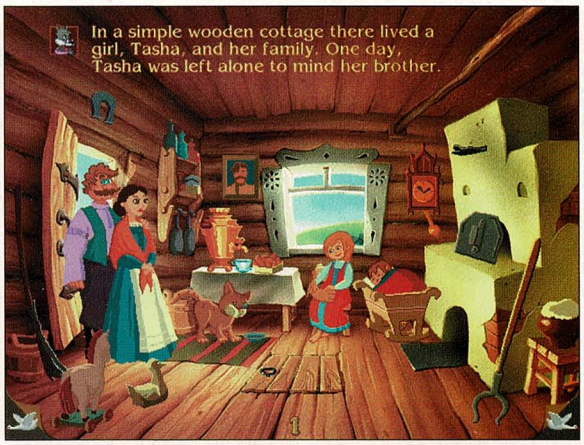
Price: £34.99. **Out:** now.
Age range: three to nine.
Requires: LC475/Performa 630 or better, 3Mb of free RAM, System 7.1 or later, a 13-inch, 256-colour monitor and a double-speed CD-ROM drive.
Contact: ABLAC Learning Works on 01626 332233.

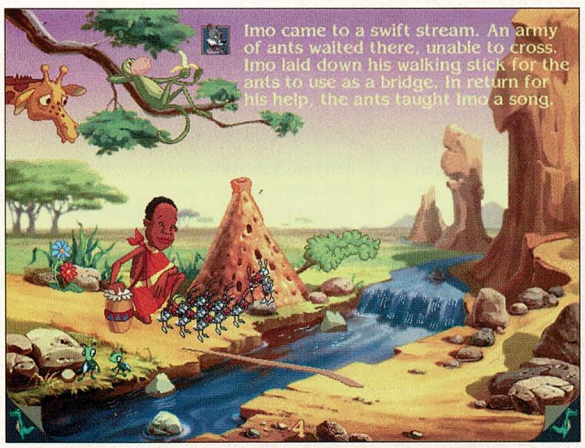
MACFORMAT RATING 82%

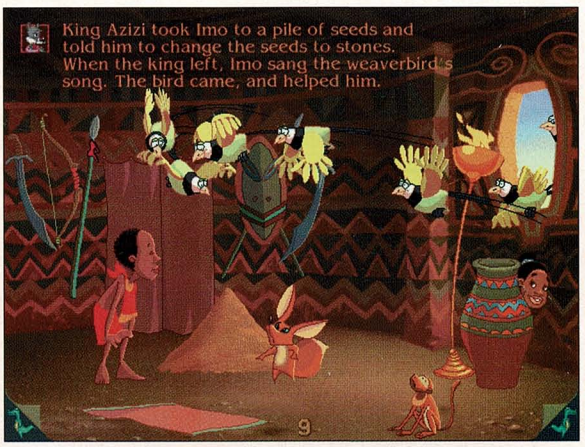


(Right) Baba Yaga is the best-known figure in Russian folklore, and this is a very modern interpretation of her.

(Far right) Realism goes out of the window in *Baba Yaga*, as these parents pop out to the shops, leaving Tasha in charge of little Niki.




Imo came to a swift stream. An army of ants waited there, unable to cross. Imo laid down his walking stick for the ants to use as a bridge. In return for his help, the ants taught Imo a song.

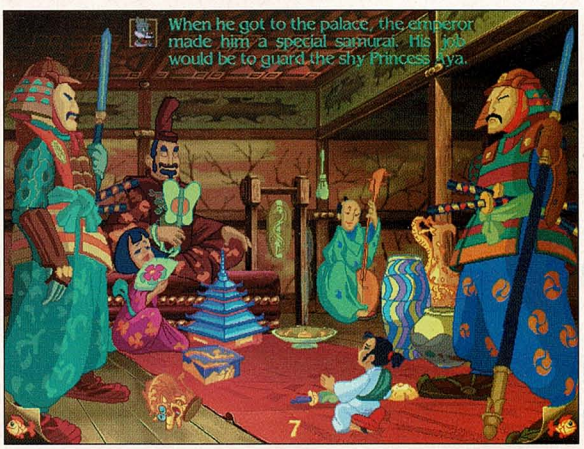

King Azizi took Imo to a pile of seeds and told him to change the seeds to stones. When the king left, Imo sang the weaverbird's song. The bird came, and helped him.

(Far left) One good turn deserves another. When Imo helps out his friends the ants, he doesn't realise how grateful they'll be.

(Left) The weaverbirds lend a hand. All three *Magic Tales* feature excellent music and animated action.

(Right) Be careful what you wish for – you might get it. In *The Little Samurai*, Taro is a celestial gift.

(Far right) Taro sets out to prove his courage in a tale that has dozens of hidden hotspots of song and dance.



boy in the charge of your eight-year-old daughter. In this Russian cautionary tale, our young heroine Tasha has to contend with some serious poultry action after a nasty witch's geese nick little Niki, the baby. *Baba Yaga* fights it out with *The Little Samurai* in trying to be the disc that wanders the furthest from its source material – and the American-style comedy geese are certainly the main culprits. But the slickness of the presentation means you'll have a fine time, even though it doesn't feel all that Russian.

The Little Samurai

Taro is a gift from the gods, a miniature boy born to loving foster parents from a golden apple. But as he grows up and tries to show the braveness in his heart, will his tiny size mean no one accepts him? *Does* size matter?

If you're expecting a worthy parable telling you that people will accept you for what you are so long as your spirit is strong, you'll be disappointed by this tale's quick-fix conclusion. And perhaps it's because the culture of feudal Japan is so far from ours, but the song lyrics and animated gags seem nonsensically out-of-place. It is possible to suggest culture through presentation better than has been done here. **MF**

Continued on next page

BABA YAGA

Price: £34.99. **Out:** now.
Age range: three to nine.
Requires: LC475/Performa 630 or better, 3Mb of free RAM, System 7.1 or later, a 13-inch, 256-colour monitor and a double-speed CD-ROM drive.
Contact: ABLAC Learning Works on 01626 332233.

MACFORMAT RATING 76%

THE LITTLE SAMURAI

Price: £34.99. **Out:** now.
Age range: three to nine.
Requires: LC475/Performa 630 or better, 3Mb of free RAM, System 7.1 or later, a 13-inch, 256-colour monitor and a double-speed CD-ROM drive.
Contact: ABLAC Learning Works on 01626 332233.

MACFORMAT RATING 72%

Kiyeko and the Lost Night

Join little warrior Kiyeko and explore another world – the world of dreams.

DREAMTIME?

The Australian Aborigines believe that the landscape was formed by mythological creatures, so that a riverbed, for example, is actually the trace of a giant snake, and so on. These things happened in the Dreamtime – but these creatures are still spiritually 'there' in the landscape, so the Dreamtime is also a mystical state of being, and for that reason is often called the Dreaming. Got it?

You've heard of the Aboriginal Dreamtime? Now here's a South American variation. *Kiyeko and the Lost Night* takes you deep into the Amazon heartland, where a tribe attempt to recover the stolen night. The villains responsible are the snakes, who are holding the darkness hostage in return for gifts from the tribespeople.

How the conflict is resolved is told over 11 beautifully-detailed pages. The animation proceeds at its own leisurely rate, making the laid-back *Kiyeko* different from other CD-ROMs, which tend to have more cartoon-like pacing. The tale has a genuine feeling of magic that isn't completely diffused by the wisecracking snakes and other modern touches. The villagers don't just believe in the mystical world; they live in it. Just wait until you see the scene when the first few precious moments of night are recovered, and the villagers literally float into sleep.

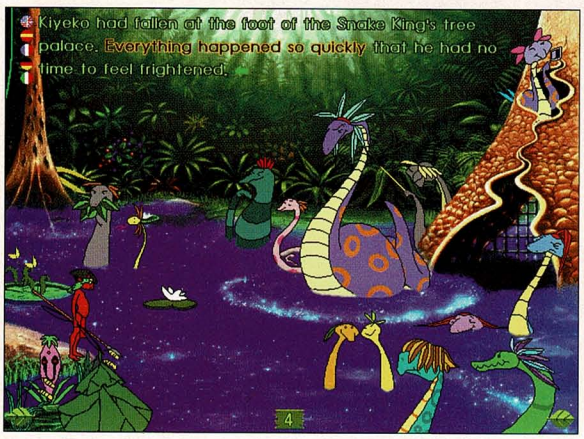
You'll get plenty of enjoyment from the hidden hotspots as you meander through the pages. There are a good two dozen concealed in each picture, offering a decent reward for careful investigation. You can read and hear the narration in five languages, which might be convenient for the company in its efforts to sell *Kiyeko* across Europe, but won't do you a great deal of good. With more thought, Ubi Soft could have taken the raw material here and used the universal themes of the story to inspire you into a bit of basic language learning.

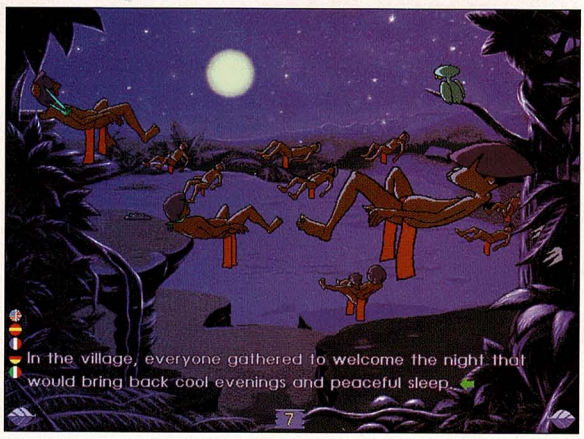
As it is, the educational value is limited to what's in the story itself and a colouring and puzzle book that's in the box as well. *Kiyeko and the Lost Night* is a lovely, expansive tale, but the scale of its imagination leaves you wanting more down-to-earth assistance for you to explore its ideas. **RICHARD HILL**

KIYEKO AND THE LOST NIGHT

Price: £29.99. **Out:** now.
Age range: four and over.
Requires: LCIII or better, 1.6Mb of free RAM, System 7.1 or later, 256-colour monitor, double-speed CD-ROM drive.
Contact: Ubi Soft on 0181 941 4004.

MACFORMAT RATING 78%

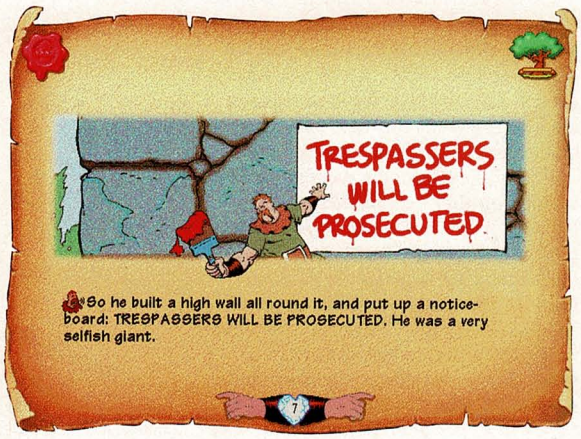

Kiyeko had fallen at the foot of the Snake King's tree palace. Everything happened so quickly that he had no time to feel frightened.
4



(Far left) Brave Kiyeko takes on the snakes after they take the night hostage, and you can read how it all happens.

(Left) You'll believe in magic after moments like the brief return of the night. Click on the natives to discover their dreams.

The Selfish Giant


TRESPASSERS WILL BE PROSECUTED
So he built a high wall all round it, and put up a notice-board: TRESPASSERS WILL BE PROSECUTED. He was a very selfish giant.
7

Definitely not a big friendly giant, this one keeps the children out of his garden in Oscar Wilde's fairy tale.

Mirror mirror on the wall, which is the most traditional of them all?

If you don't believe fairy tales should be mixed with modern dialogue and attitudes, take a look at the steadfastly old-fashioned *Selfish Giant*. It adapts the children's tale written by Oscar Wilde, and more particularly the recent version illustrated by P Craig Russell (well-known in the United States for his award-winning comic work).

The Giant lives in a beautiful garden, but he won't let the local children play in it. But once the children have gone, no one – not even the weather – will come into the garden. It's a simple story told in measured, graceful language, echoed by the swirling, natural forms in the artwork; but it suffers in its translation to CD-ROM. The attempt to animate Russell's drawings is unconvincing, probably because it's a compromise between expensive full animation and none at all. The figures

The Lion King

The biggest cat of them all is now making CD-ROMs. But can Disney keep the magic?

It may be the most recently-written of the tales here, but the marketing power of Disney has made *The Lion King* the best-known in little time. The Animated Storybook adapts the tale you saw on film into CD-ROM form, with computerised pages unfolding the tale of Simba, an orphaned cub who rejects his heritage as the ruler of the land until he learns a few important lessons from his friends.

As in *Magic Tales* (see page 98), you can have the narrator take you all the way through the story, or you can elect to travel at your own pace, stopping off at many of the pages to try out the hidden hotspots to start off animations. They may not be up to the standard of the film, but the graphics are excellent for CD-ROM, looking very similar to the movie visuals. And most of the voices from the film have been carried across as well.

Unfortunately, the Animated Storybook rattles through the story, to the extent that it makes unclear some important points (like what happens to the landscape when bad guy Skar becomes ruler). And the transitions between pages, where the screen goes black while voices continue to speak, will confuse you at first.

Icons of characters lie on borders to each side of the main story screen. These offer help with difficult words, or take you to other areas of the disc. The borders look lovely, but you have to look in the manual to remind yourself what each icon does. There are three games to accompany the story but they're a little half-hearted, with a playful interlude of cat-and-mouse as the highlight.

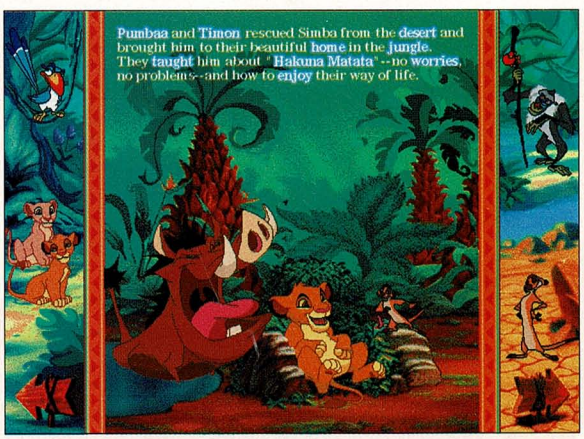
The real trouble with the Animated Storybook is its price. As good as the CD-ROM presentation of the story may be, the Disney brand and characters really shouldn't be enough to convince you to part with £45 for it – after all, many other CD stories offer you a better deal.

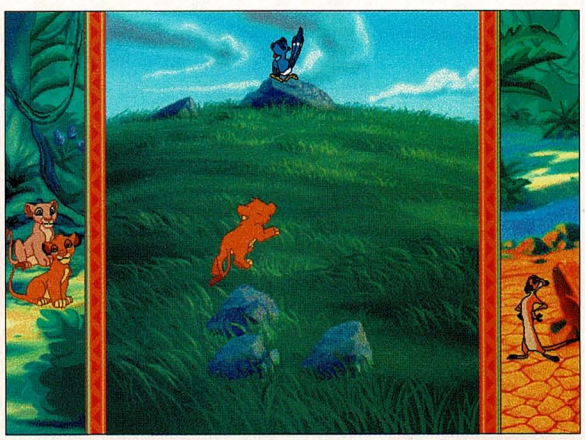
RICHARD HILL

THE LION KING

Price: £44.99. **Out:** now.
Age range: up to nine.
Requires: LCII or better, 2.8Mb of free RAM, System 7.1 or later, 13-inch, 256-colour monitor and a double-speed CD-ROM drive.
Contact: Buena Vista Home Entertainment on 0171 605 2400.

MACFORMAT RATING 67%


Pumbaa and Timon rescued Simba from the desert and brought him to their beautiful home in the jungle. They taught him about "Hakuna Matata" --no worries, no problems--and how to enjoy their way of life.



(Right) Read all about Simba's adventures. Some words are explained if you don't understand them.

(Far right) When you've read the story, you can try the games – like this one where you have to creep up on the bird.

jerk in a stilted way that's reminiscent of puppets on strings, when what you long for is flowing movement. Worse still, the drawings seem to have been crammed into a small space merely to enable text and control buttons to fit on the screen too.

But the strength of the original material overcomes its treatment, to some extent, and it's told over a generous 52 pages. And the real surprise of the disc is that for once there's more to it than just the story.

If Wilde's delightful use of 19th century English means little to your 1990s child, you can click on many of the terms that have been used to see and hear a clear definition. The producers of the story aren't afraid of stretching the mind a little in the cause of art.

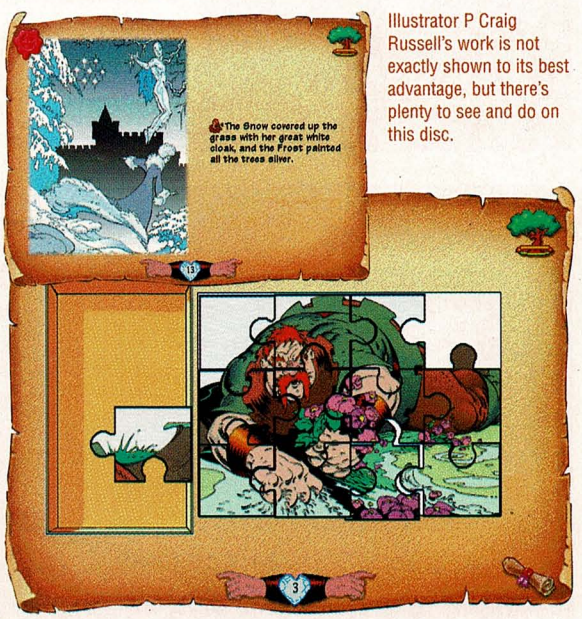
There's a chunky section of games and puzzles, including several colouring pages, join-the-dots and jigsaws. You also get an introduction to Oscar Wilde and subjects like giants and gardens in the Victorian era. It's all rather sketchy, but at least an effort has been made to show how the story is based on real life, and how it affects your perception of the world.

RICHARD HILL

THE SELFISH GIANT

Price: £19.99. **Out:** now.
Age range: four to nine.
Requires: LC or better, 4Mb of RAM, System 6.0.7 or later, 13-inch, 256-colour monitor and a CD-ROM drive.
Contact: CentreGold Multimedia on 0121 625 3366.

MACFORMAT RATING 73%



Illustrator P Craig Russell's work is not exactly shown to its best advantage, but there's plenty to see and do on this disc.

Jigsaws, colouring, background reading – you can even find a sing-song session in the activities section.

What's My Story?

Books and movies collide in a classic updating of the traditional art of storytelling. Not a Ninja Turtle or Skeleton Warrior in sight.

In the modern King Arthur story, King Arthur is a ten year old boy, and the giant he meets takes the form of a toyshop bully boy.

MACFORMAT Classic

Storytelling, the most ancient and soothing of childhood activities, is becoming a lost art. Hansel and Gretel have become the Power Rangers and Thorg the Destroyer stands where Rapunzel once threw down her hair. A symptom of the modern world perhaps. *What's My Story?* attempts to redress the balance by including not only eight fairy tales but the ability to create and develop your own ideas into a readable, listenable and watchable folk tale. *Jackanory* for the digital age.

Conceived and narrated by Jill Wright, *What's My Story?* brings an ancient art into a modern context (King Arthur, for instance, is a ten year old boy in trainers), and although all of the stories start with 'Once upon a time', the themes that run through them are essentially timeless. Every story is accompanied by a spectacular, well acted and high quality video, evocative music and glorious sound effects, but it's not until you create your own masterpiece that these elements really come into their own.

What's My Story? enables you or your children, with the aid of a microphone, to tell your own stories – a potentially rewarding experience. The agenda is almost entirely up to you. There's a choice of six hundred video clips, a hundred musical motifs and a huge array of colourful characters for compiling your own movies. Help is always available and you are prompted at every step as you develop your characters and storyline. You can customise, innovate or just play it for laughs. The storytelling is, after all, your or your child's responsibility (up to a point) and the scope for experimentation is huge.

Stories can be saved neatly onto your hard disk and retold at a later date through the playback facility. The older your child, the more complex the stories he or she can create. Everything in *What's My Story?* is super fast (thanks to the inclusion of a 5.1Mb speed-up file) and about as user-friendly as you can get.

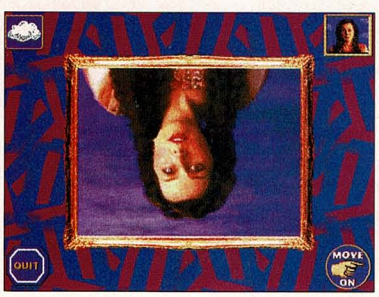
With the addition of two companions *(Colouring Book Art* and *Screen Art)*, which enable a different, more simplistic method of learning, *What's My Story?* amounts to a well-rounded and thoroughly enjoyable 21st Century multimedia package. Through the often misused medium of the computer screen it unleashes the imagination, and encourages it to run riot. *What's My Story?* isn't designed to replace the bedtime story, but to add to the process of learning through words and pictures. Something that should guarantee a thousand happy ever afters.

GIL GILLESPIE

HIGHBROW

What's My Story? has received praise from bodies including The American Institute for Research on Learning, The University of California and Stanford University.

Ever modern, *What's My Story?* includes a tale telling of bravery among the native Indians.



Your storyteller Jill Wright is a constant and reassuring presence throughout. She can do all this stuff standing on her head, no problem.

The stories cross many genres and deal with many different ethnic groups. Here we see a Japanese love story unfold.

WHAT'S MY STORY?

Price: £35 to £40. **Out:** now.
Requires: LCIII or better, 3Mb of free RAM, 13-inch colour monitor, System 7 or later, double-speed CD-ROM drive, microphone. Non-Duo PowerBook not recommended.
Contact: Acclaim on 0171 344 5000.

MACFORMAT RATING 91%

A Jewish man gets hot under the collar – he and his family live in a box room and are in need of a little magic.

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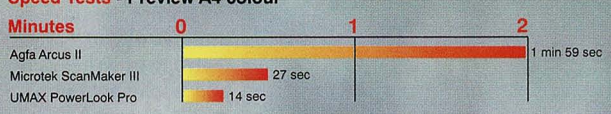
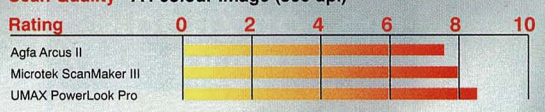
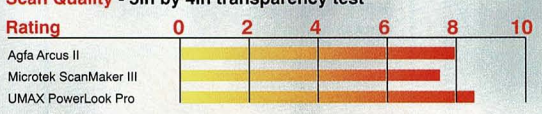


Speed Tests - Scan A4 colour

Scan Quality - A4 colour image (300 dpi)



Scan Quality - 5in by 4in transparency test



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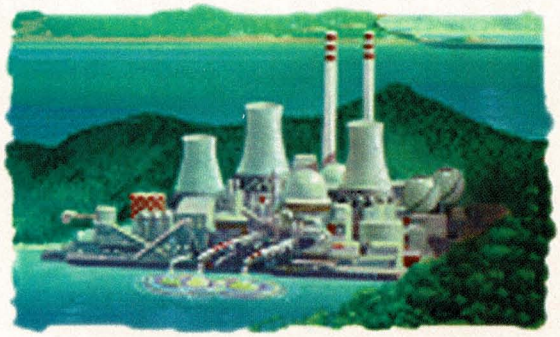

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Storybook Weaver Deluxe

Myth, legend and a 40-foot monster in your own back yard. Welcome to a place where the imagination is set free and the bizarre is humorously embraced.

Children are the world's greatest surrealists. Picture this: a concrete shopping mall sits beside a lake. To the left an aeroplane flies inches above the head of an oversized ballerina, whose view is obscured by a six-armed man in a blue swimming costume whose head is on fire. Below them, in the still waters of the lake, a sports car swims for dear life and an astronaut floats mysteriously above the head of a giant dinosaur. Dogs bark, a happy song rings out and the story beneath the picture tells of the great heroics of a purple-faced cowboy. No, this is not Luis Bunuel; this is the imagination of an eight year old boy using the dynamic kid-friendly learning tool, *Storybook Weaver Deluxe*. Scary, isn't it?

Featuring over a thousand images, a hundred sound effects and sixty children's songs, *Storybook Weaver* enables children to create, illustrate and listen to their own Desktop tales. The idea is simple – choose from the easy to use menus of backdrops, fill the scene with characters (mythical and real), and write a story about your creation. When the story is complete, you can listen to it with the text-to-voice facility, bringing your child's words and pictures to life. The best thing about *Storybook Weaver* is that it places absolutely no restrictions on the imagination and encourages experimentation – surely the best way to learn? And because of the sheer volume of possible graphical combinations, the playing time is potentially unlimited.

You can control everything with your mouse – even six year olds will have little difficulty getting to grips with it. Only the drag and click should present any real problems. For older kids, a paintshop program is included, enabling you to customise scenes, giving that all-important personal touch – blue people, red skies, green sheep... The graphics, although basic cartoons, are expressive enough to give the fantasy scenes maximum impact, while the storytelling unfolds with minimum complication and maximum vision. The menu screens are easy to use scrolling affairs designed for children.

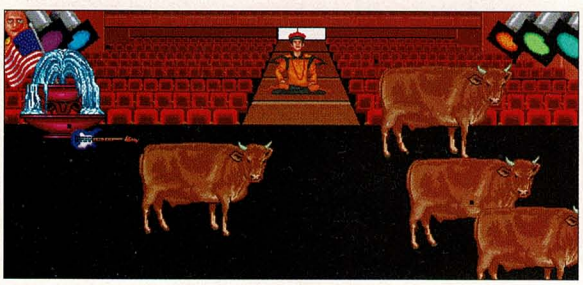
It's the text-to-voice facility, however, that is most exciting. The speech is of the highly digitised Dalek-woman-on-Helium variety, but is comprehensible and highly amusing (you can have endless fun making your Mac say rude things). The tone throughout is irresistibly cheeky. It's as if children have designed *Storybook Weaver*, deciding for themselves what will guarantee the most fun.

It's not the traditional way of learning to write, and it may not fall within Government education guidelines, but *Storybook Weaver* adds a much needed dash of anarchy into a world populated with too many Janets and Johns.

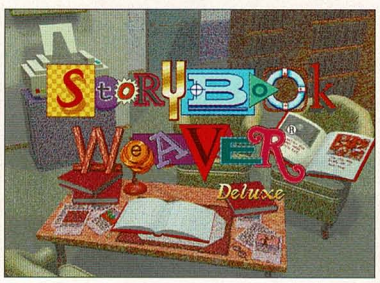
GIL GILLESPIE

WRITER'S BLOCK

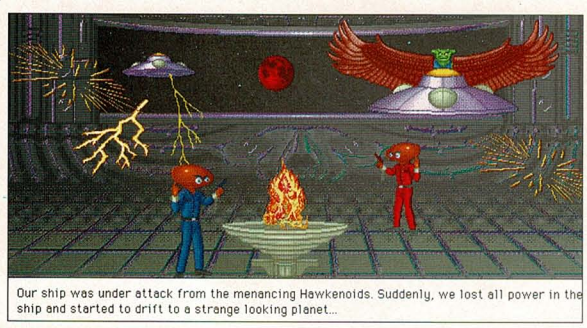
For the reluctant writer, *Storybook Weaver* offers a section containing preset scenes and beginning lines of stories, which your child can then complete.



Theatre of Heifers. You'll laugh, you'll cry, you'll gape in disbelief as *Storybook Weaver* sends your child's imagination straight into orbit.



The interface is simple, welcoming and easy to use – and is wholly mouse-controlled.


Our ship was under attack from the menancing Hawkenoids. Suddenly, we lost all power in the ship and started to drift to a strange looking planet...

Planet C for Chaos. Even the preset scenes in *Storybook Weaver* border on lunacy.

The graphics neatly encourage writing.

LEARN TO SPELL

Storybook Weaver includes a spell checker and thesaurus.

The tendency to fill the screen with cultural cross-referencing is overpowering.

STORYBOOK WEAVER

Price: £19.95. **Out:** now.
Requires: any Mac, System 7.1 or later, 5Mb of RAM, 13-inch colour monitor, CD-ROM drive.
Contact: Iona Software on 0181 296 9454.

MACFORMAT RATING 83%

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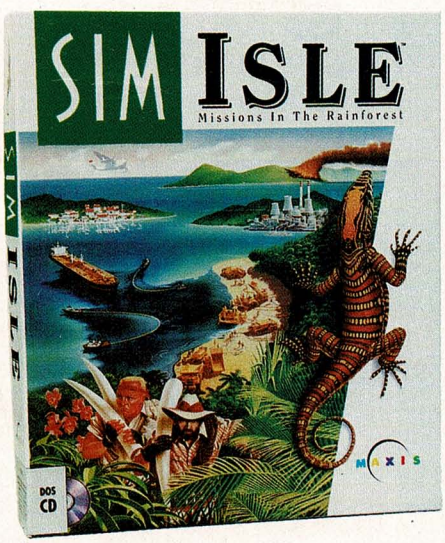

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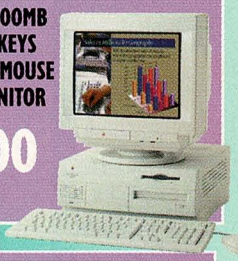

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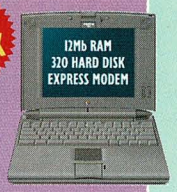

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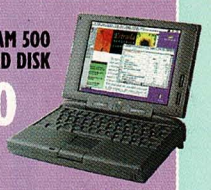

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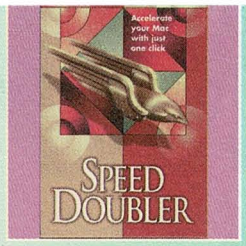

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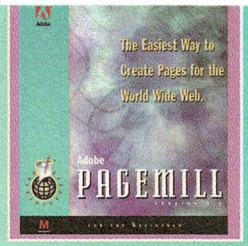

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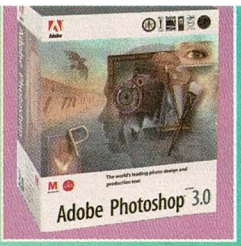

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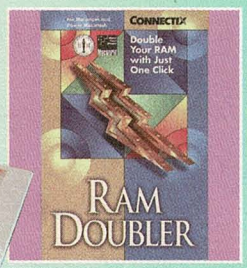

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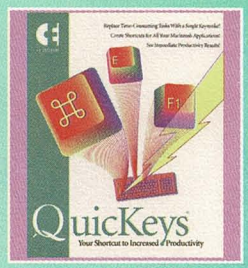

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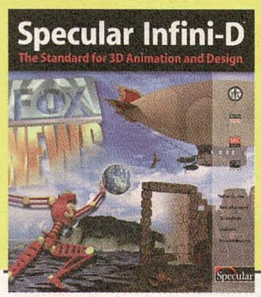

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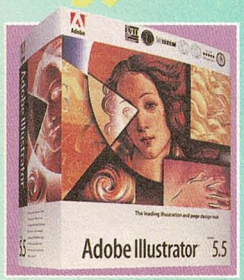

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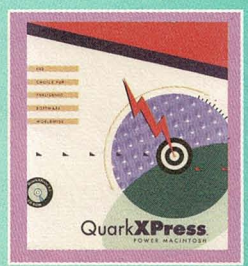

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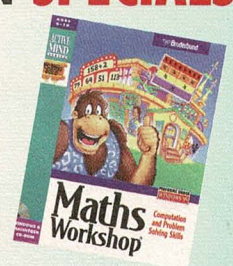

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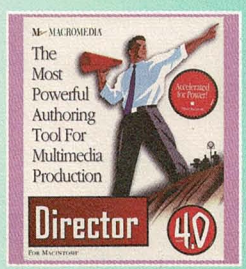

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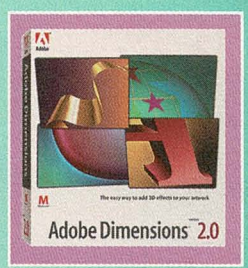

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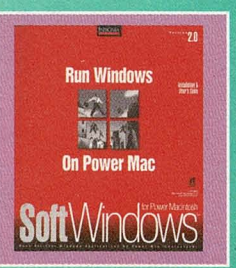

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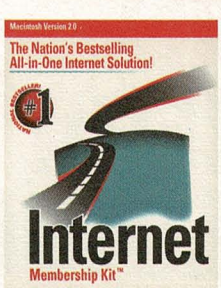

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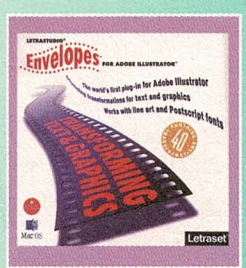

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Story Artist Kit

A CD that encourages the imagination to roam ancient history, oriental fairy tales and Gothic horror. Or is it all an illusion?

To call this *Story Artist Kit: Faraway Adventures* is like calling Robson and Jerome the greatest musical coupling since Lennon and McCartney. The only faraway place your children are likely to go once they've seen this is straight back to the television.

Like the superior *Storybook Weaver*, this paint and word program is intended to encourage your children to sit at a monitor, where once they sat at the table with crayons and paper. The big difference is that here all your children get is a black and white sketch of a given location (Ancient Egypt, Arabian Nights and Dracula are the peculiar mix) and use the paint program to colour it in – hardly an adventure. After this laborious task they can write a story about the scene they have created and print it out for all to see on your new colour printer. You haven't got one? Hmm.

Perhaps to add a touch of interest, *Story Artist Kit* has a flavour of the mystical East crudely bolted on. Why the mystical East, you ask? No obvious reason – but then, the whole thing is something of a sham. For a start, *Story Artist Kit* is nigh on impossible to use. The paint program is for adults – the only children likely to benefit from it are undersized Einsteins with a degree in graphic art. More often than not your painting resembles an accident rather than a masterpiece, with colour overlapping the outlines, splodges everywhere and gaps of white peering through the psychedelic haze.

Even the manual, which is no longer than your average paperback and is included to make things 'easy', is a complicated mish-mash of resolution commands, JPEG compression techniques and paint dithering. 'Why not print the background scenes and then colour them in?' urges the spiel. Why not just buy a colouring book and do exactly the same? As if realising the product's shortcomings, the makers have included a section on the meanings of ancient Egyptian hieroglyphs – about as useful to kiddies as a Black and Decker workbench.

This cheap shot at making money should fool no one. It will neither encourage your children to write nor aid artistic creativity. The themes are outdated, irrelevant and meaningless to anyone except Egyptologists or people with fangs, and the backgrounds with which your children are supposed to work are badly drawn line images with little or no 3D.

Jumping on the back of the *Aladdin* fever that hit the nation's under-tens a couple of years back is one thing, but cobbling together two adult programs and trying to sell it to children is another. *Story Artist Kit* is nothing short of a disgrace.

GIL GILLESPIE

STORY ARTIST KIT

Price: $49. **Out:** now.
Requires: Mac LCII or better, 2Mb of RAM, System 6.03 or later.
Contact: Mountain Lake Software on 00 1 415 752 6515 or e-mail **sales@mtlake.com**

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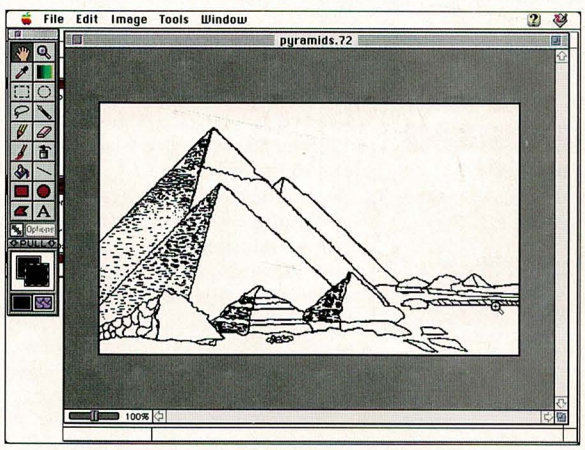
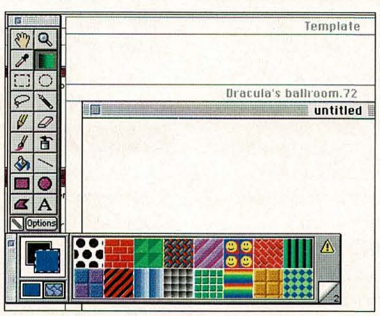
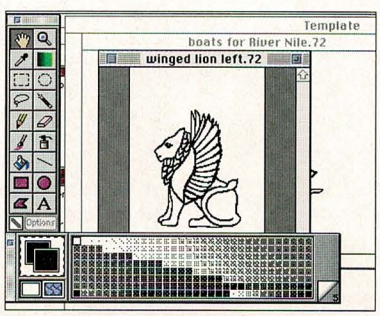


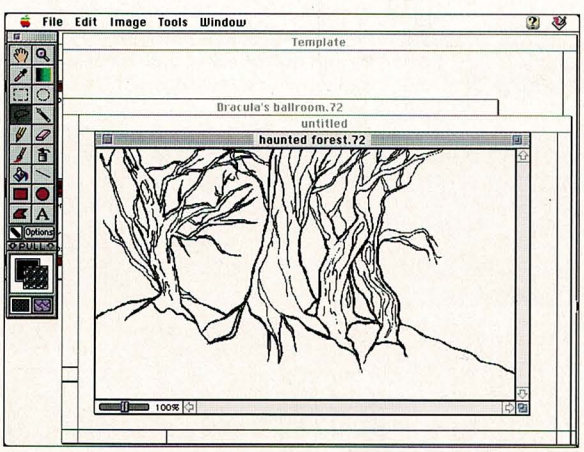
Those pyramids in full. Not hugely impressive, are they?



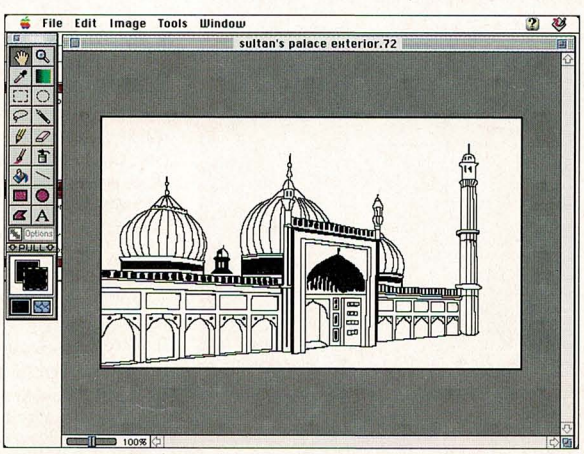
At last, a dash or two of colour. Now all you have to do is work out how to use the paint package.



A cheap sketch of a cheap lion. Nothing here is roaring.



(Far left) At night. A dark forest threatens... As you can see, the drawings in *Story Artist Kit* are hardly likely to inspire creativity.



The Arabian Nights are about as evocative as Birmingham city centre on a Tuesday night.

SHAREWARE AND PD

Colin Dalziel dons his virtual spacesuit and, with only a cup of Bovril for nourishment, goes in search of new and exciting shareware.

All the shareware featured here and more is on our covermounted CD-ROM

Downloading large software files from the Internet is like driving into work in the morning. You get halfway there without any problems, then just as you hit the outskirts of town, everything snarls up and slows down. Same with downloading files – the first half of the transfer goes quickly, then the rest crawls along for another half hour or so. And you're always just too far through the download for it to be worth cancelling it. Doh! Avoid all these problems by loading all the shareware that's included on these pages, and more, straight from our Cover CD.

ShootMe

GAME

Shareware, registration fee $5

Shooting things is fun – computer games have worked on this premise since the early days of *Space Invaders*, and with a name like *ShootMe*, this game doesn't attempt to disguise what it's about. No need for subtlety, *ShootMe* a good old-fashioned shoot-everything-that-moves game.

To play, you use the mouse to shoot the creatures that wander, wobble and sprint across the screen. The targets are well drawn and make a particularly pleasing sound when you shoot them. As long as you've hit a predetermined percentage of the targets, you can then move on to the next level, where a different strain of target appears.

On the first two levels, the targets move from left to right across the screen, but as you progress they start coming at you from all angles. You have a range of weapons at your disposal and each of the targets has a particular weapon that is best suited for the job of killing them off. You select weapons as you play and can change your means of destruction at any time with a keypress.

The game's stereo music is wonderfully cheesy, especially the version of *New York, New York*, which plays when the high scores are displayed. The challenge factor can be set at anything from very easy to almost impossible, so almost anyone (bar the most experienced games player) should get some mileage out of *ShootMe*.

No matter how cute the little invaders look, it is your duty to point your loaded gun at them and kill every last one of them in the deathfest that is *ShootMe*.

Symbionts 2.6.2

EXTENSIONS UTILITY

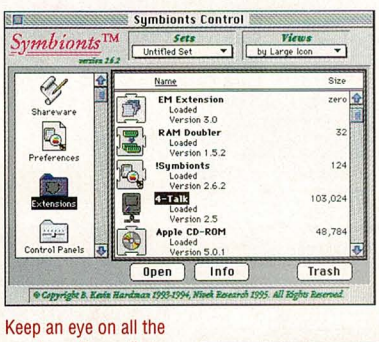
Shareware, registration fee $20

When you start up your Mac, you see the icons for your Extensions as they load. However, not all Extensions actually display an icon on startup, so you may be innocently loading programs you don't need, which is a waste of valuable memory.

Symbionts monitors the startup process by displaying all the icons for the Extensions that are loaded, including those that don't normally reveal themselves. The name and amount of RAM allocated appear below each Extension's icon, and since the name may be abbreviated, it's also displayed in full at the top of the screen.

There's a Control Panel version of *Symbionts* too, which works in a similar way to System 7.5's Extension Manager, but gives you more information on the Extensions, such as the file size, version number and whether the file is loaded.

If you want to load a file, or stop a file from loading, double-click on the selected file icon from within the *Symbionts* Control Panel, and next time you restart, the appropriate alteration will take place. For System 7.5 users, *Symbionts* gives you better monitoring of the startup sequence. If you are using older System software, *Symbiont's* controls are a handy addition to your utility collection.



Keep an eye on all the sneaky software that loads without you even knowing when you start up your Mac using *Symbionts*.

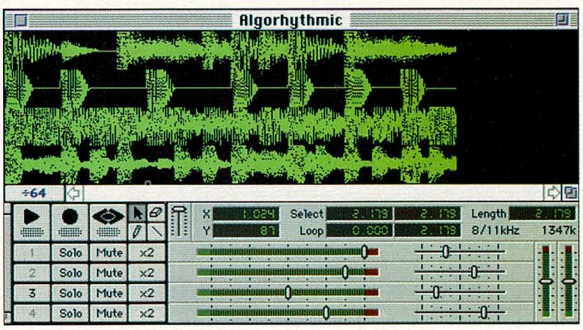
Sound Sculptor 2.0

SOUND EDITOR

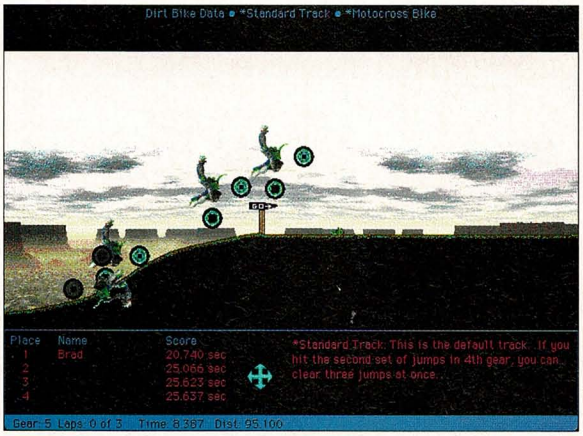
Shareware, registration fee $30

Messing around with sound files can be great fun at any level, and *Sound Sculptor 2* gives you the highest level of control possible in an extremely powerful shareware package. It gives you full control of stereo sound – which can be up to CD standard output if your Mac supports high quality sound input and output.

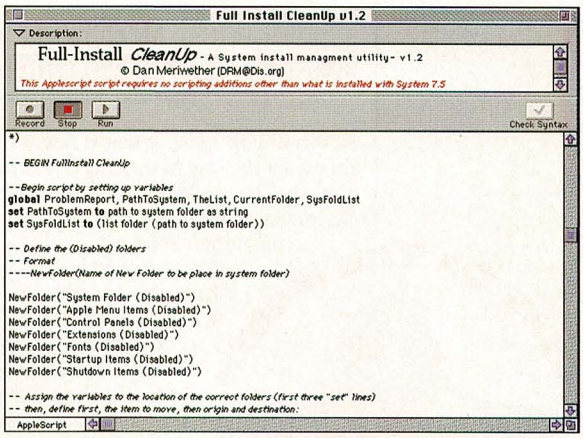
Sound Sculptor plays four tracks of stereo sound with facilities to mix down to both stereo and mono. The range of effects is truly stunning, with everything available from delays, echoes and fades to filtering and even reversing your sounds. The precision of control is as high as you could want and you can select individual digital sound samples. The interface is well designed, with level meters and controls for solo, mute, boost, volume and pan for each track – so now you can try out all your mix options before you make the final mix down.



Sound Sculptor is a great choice for editing, mixing and adding effects to almost any sound file.


Dirt Bike Data • *Standard Track • *Motocross Bike
Place Name Score
1 Brad 20.740 sec
2 25.066 sec
3 25.623 sec
4 25.637 sec
*Standard Track: This is the default track. If you hit the second set of jumps in 4th gear, you can clear three jumps at once...
Gear 5 Laps 0 of 3 Time 8.367 Dist 95.100

Make sure you get plenty of practice, and you too can avoid crashing and landing on your head in the fun *Dirt Bike*.


Full Install CleanUp v1.2
Description:
Full-Install CleanUp - A System Install managment utility- v1.2
© Dan Merriwether (DRM@Dis.org)
This Applescript script requires no scripting additions other than what is installed with System 7.5
Record Stop Run Check Syntax
-- BEGIN FullInstall CleanUp
--Begin script by setting up variables
global ProblemReport, PathToSystem, TheList, CurrentFolder, SysFoldList
set PathToSystem to path to system folder as string
set SysFoldList to (list folder (path to system folder))
-- Define the (Disabled) folders
-- Format
----NewFolder(Name of New Folder to be place in system folder)
NewFolder("System Folder (Disabled)")
NewFolder("Apple Menu Items (Disabled)")
NewFolder("Control Panels (Disabled)")
NewFolder("Extensions (Disabled)")
NewFolder("Fonts (Disabled)")
NewFolder("Startup Items (Disabled)")
NewFolder("Shutdown Items (Disabled)")
-- Assign the variables to the location of the correct folders (first three "set" lines)
-- then, define first, the item to move, then origin and destination:
AppleScript

Get rid of all the non-essential files from your System folder with the help of AppleScript and *Full Install CleanUp*.

As with any sound processing package you'll need plenty of hard disk space available if you're going to mix four tracks of CD quality sound together. If you're new to working with sound, you shouldn't have many problems – there is a helpful on-line user manual under the **Apple** menu, which explains the controls and demystifies most of the technical terms you're likely to encounter.

Dirt Bike

RACING GAME

Shareware, registration fee $15

There is an almost total lack of decent racing games available on the Mac, both in the commercial sector and in the world of shareware. Shareware based racers are usually badly drawn and lack anything resembling playability, but *Dirt Bike* is a fun motocross-based game that really lays down the challenge, with an easy to use format.

The controls couldn't be easier: you use the mouse to control the amount of throttle, moving the pointer to the top of the screen to turn on the power, and towards the bottom of the screen to ease off. The gears are controlled by the mouse button and a predefined key. A click on the mouse moves you up a gear, while pressing the defined key takes you down a gear.

When you start the game, the first click of the mouse starts the bike's engine – if you move the mouse up and down the screen, you'll hear the bike's revs raise and fall. The next click on the mouse starts the race and puts you into first gear. The start is one of the trickiest parts of the game. As with a real bike, if you turn on the power too quickly from a standing start, the front wheel lifts off the ground and the bike goes sailing over your head. So treat the power with respect and ease it on – don't be too gentle, though, or you'll be left standing at the start line.

Once you've mastered getting the bike moving, you'll need to learn how to jump correctly as you hurtle around the track. It's a matter of getting the power right as you fly through the air. Keeping the revs up raises the front of the bike, but if you are about to go into a spin, dropping the power helps to lower the front of the bike and – with luck – stops you landing on your head and bouncing along the track. Plenty of practice is needed if you are going to master jumping and handling the bike. The unregistered version only gives you one track to try out, but it's enough to give you a feel for the racing action.

Full Install CleanUp

EXTENSIONS UTILITY

E-mailware

When you install or reinstall System 7.5, the powers that be have decided you'll still get a selection of software that is less than essential. *Full Install CleanUp* is a handy utility that rids you of all those superfluous Apple Menu items, Control Panels and Extensions from the System Folder after installing System 7.5.

The program does all the cleaning up thanks to System 7.5's AppleScripting capabilities. First, it scans through the System and creates a 'Disabled' folder if it finds anything you don't need. It then moves any files that are specified in the script, such as the Jigsaw Puzzle, into the Disabled folder. It's then up to you whether you choose to delete the offending files or leave them to one side for later use.

Naturally, the AppleScript is configured to move the files that the author considers to be least important, but you can tailor it to your own needs with some fairly simple editing of the script. If you have an unstable Mac and constantly have to reinstall the System software, *Full Install CleanUp* will help keep things under control.

Addresses & Birthdays

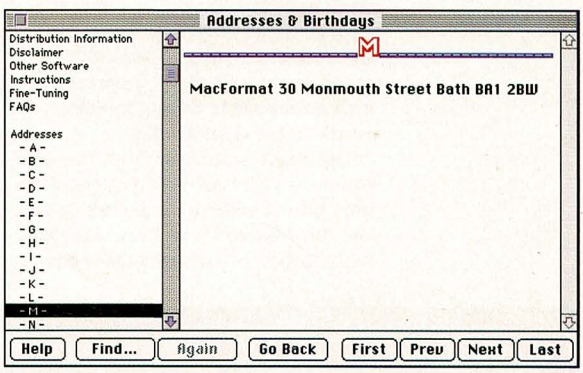
ADDRESS BOOK

Shareware, registration fee $3

There are plenty of shareware address books about, so whether there is a need for another one is doubtful, although at only $3 to register, it would really be rude to complain.

Addresses & Birthdays is a straightforward database, which enables you to build up a catalogue. It has an easy

Continued on next page



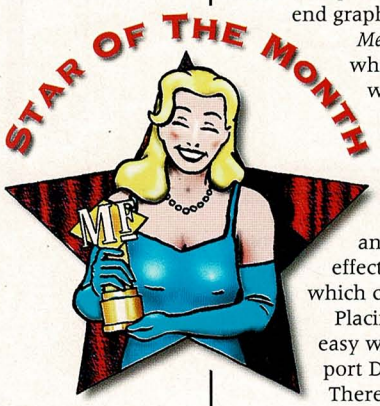
Keep all your address and birthday details in a single easy to use database listing, with *Addresses & Birthdays*.

CONFUSED ABOUT SHAREWARE?

■ **Shareware** is a form of 'try before you buy' software selling and it's a great idea so long as you're honest. When you get some shareware, the documentation file accompanying it will tell you how much it costs – typically it's somewhere between US$5 and $40 – and where to send your money. If you like the software and decide to keep it, then you're morally obliged to cough up. Not only do you get the satisfaction of boasting to friends about how honest you are, but the author will often give you something in return for registering, like a printed manual, or updates when released. The most common problem is sending money abroad, but as many shareware authors now accept credit cards, it's getting easier.

■ **Freeware** means that you don't have to pay for it at all. There are many derivations, such as postcardware, which means you have to send a pretty postcard to the author.

But freeware is not strictly the same as **Public Domain** (PD) because although you don't pay for freeware, the author keeps copyright and you have to follow his terms and conditions to use the program. This often means keeping all the files together and not using or selling them for profit.



Mechanisto 2

3D GRAPHICS

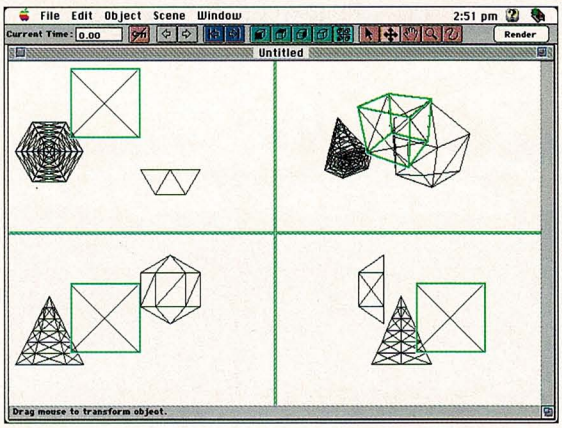
Shareware, registration fee $20

As this is a 3D issue, it seems fitting that a 3D program should be the star of the shareware pages. *Mechanisto* is a powerful 3D rendering and drawing package that includes many of the features normally reserved for high-end graphic software.

Mechanisto opens with the scene window, where you assemble your 3D images as a wireframe before rendering. Each new scene contains a camera and two light sources. The camera is the viewpoint of the final image and can be altered to give wider or narrower views, as well as animated to view a scene from different angles. There is a wide range of lighting effects, including directional and spot lights which cast shadows and have adjustable colours.

Placing geometric objects into your scene is easy with the **Objects** menu, and you can import DFX wireframes from other 3D packages. There are a wide range of textures (or shaders, as *Mechanisto* calls them) that can be applied and combined to give your objects realistic surfaces.

When you've assembled your wireframe scene, the next stage is to render the image. The general defaults are adequate for most images, but as you get more advanced in your 3D work you can tailor them to your needs.



Why spend a fortune on 3D graphics when you can get great results from the shareware package *Mechanisto 2*.

Mechanisto can work with large files within a limited amount of memory, by rendering each object separately – so even if you have a complex scene you should be able to avoid 'out of memory' messages (as long as the individual objects aren't too big). There's an excellent software manual that guides you from placing simple objects in a scene through to complex lighting effects. The program is only available in a PowerMac version, but then, 3D really does benefit from a PowerMac's capabilities.

point and click interface, so you can access your address entries by alphabetical listing and your birthday lists in month order. That's it. Quick, easy and cheap. What more do you want?

Snavely!

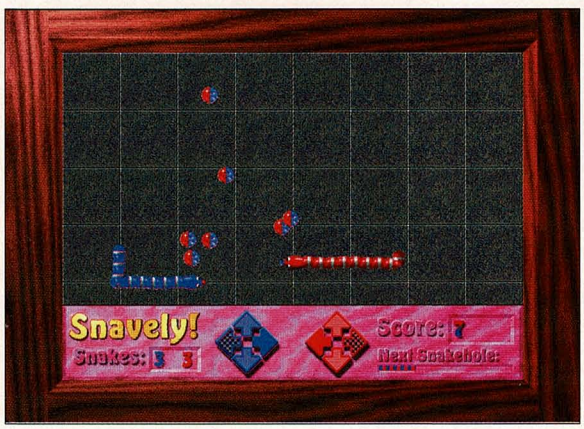
GAME

Shareware, registration fee $15

You need your wits about you to get anywhere with *Snavely!* Controlling two snakes at once, you must get them to slide across each other as they move over the board. Each time the serpents cross they produce an egg, and you win a point. Once you've produced enough eggs, you're presented with a snake hole through which you escape to the next level.

This might sound like a breeze, but you mustn't let either of your snakes stray off the edge of the board, or you lose one of their three lives. An added complication is that the snakes change direction whenever they meet an egg, so while you're busy keeping one snake on the board, the other may be changing direction and merrily slithering towards death. As you move up the levels, other factors come into play, such as stomping feet that smash your eggs to pieces, and cups of coffee that send the snakes into a caffeine frenzy, causing even move confusion as you try to keep your lively lizards on the board.

It takes a few games to get the hang of moving the snakes around, but once you've mastered the slippery serpents, the challenge factor has a certain addictive quality to it. It's one of those games where you just have to finish a level before switching off. The game is well designed, with polished, colourful graphics, and it makes a pleasant change not to be shooting everything in sight.



Friendly snakes love to meet in the testing game of *Snavely!* Every time their paths cross, an egg appears – but make sure they stay on the board.

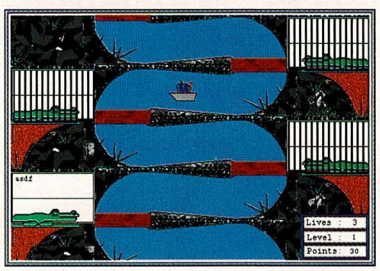
Learn To Type

TYPING TUTOR

Shareware, registration fee £10

If you rely on two fingers to thrash out your letters and documents, it's worth taking time to learn to do the job properly. Even if you don't get up to the dizzy heights of 50 words a minute, you'll learn to find all the keys without having to stare at the keyboard for five minutes first.

Learn To Type uses a familiar system of repetition to teach the key positions. You start with the home keys (A, S, D, F, J, K, L and ;) and practise typing three and four letter combinations. Once you've learnt the positions of the home keys, you move on to the other keys with more typing exercises. Initially, accuracy is more important than speed – when you feel confident enough you can do a typing test which assesses your speed and accuracy.



Practise typing with a difference. You have to get the typing right or the crew in the blue boat meet a nasty end at the jaws of the green crocodiles!

To take the grind out of all the learning and practice, a game has been included based on a ship which manoeuvres around a course. Along the way are crocodiles lurking in open cages. Above each cage is a word which you must type before the ship arrives. If you type the word in time, the cage closes and you're safe to continue on your voyage. If you fail, the croc gobbles up the jolly vessel and one of your three lives is gone. Admittedly, the game is a bit naff, but it makes a change from looking at a screen full of text.

You'll be surprised at how quickly *Learn to Type* helps you increase your typing speed. You'll need to be conscientious to get the most from the program, though – if you want to get to the top of the typing pool, you should practise at least once a day.

Personality Test 1.4

PSEUDO PSYCHOLOGY QUIZ

Shareware, registration fee $12

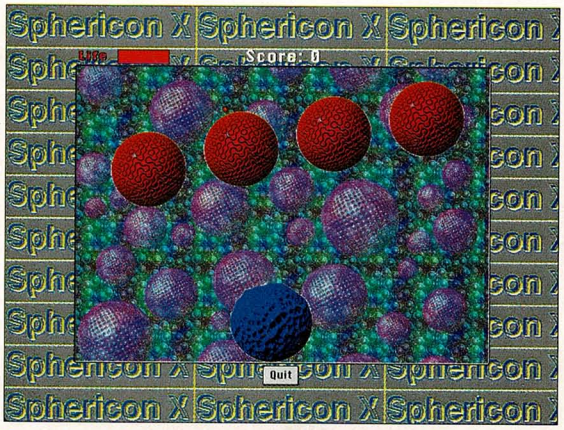
As the first part of four tests, this

Sphericon X!

SHOOTING GAME

Shareware, registration fee $5

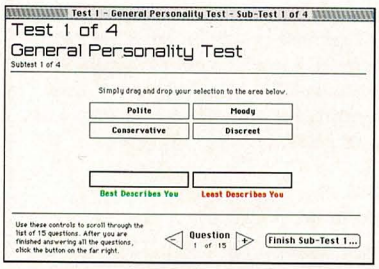
We are now in a computing age where almost anything seems possible. There are shareware developers capable of producing complex 3D rendering and animation packages which need less than one Mb of hard disk space. You can get software which enables you to mix four track sound files to CD quality on a single floppy disk. Then there's *Sphericon X!* – a game that takes up a whopping 1.4Mb, yet has as much imagination as a car park. Come to think of it, some of the car parks round here are rather nicer.



The graphics in *Sphericon* leave something to be desired. Then again, so does the gameplay. And the sound. But the bugs are impressive.

You are a Police Sphere in the cleverly named Sphereland, and your job is to seek and destroy the criminal element on the aptly named moon of Sphericon X. Does this involve a *Doom*-like search through the tunnels of the sphere moon? Or is it perhaps a flying mission over the cratered surface of this distant satellite? No, you wait at the bottom of the screen controlling a huge blue golf ball, as wave after wave of different sized spheres fall towards you. Your task is to move across the screen using the arrow keys and shoot Spherebullets at the approaching globes.

Everything about the game smacks of poor quality. There's the ten second wait before anything happens when you double-click on the *Sphericon X!* icon, the huge, jumpy graphics, the annoying music which loops on and on... Someone should have told the author about computer feedback – a nice little picture with a stop watch telling you something is happening means so much more than an apparently frozen screen. Someone should have also pointed out that small graphics generally work better and use less memory, and that the sound should enhance the playing experience rather than driving you mad. But they obviously didn't.


Test 1 - General Personality Test - Sub-Test 1 of 4
Test 1 of 4
General Personality Test
Subtest 1 of 4
Simply drag and drop your selection to the area below.
Polite
Moody
Conservative
Discreet
Best Describes You
Least Describes You
Use these controls to scroll through the list of 15 questions. After you are finished answering all the questions, click the button on the far right.
Question
1 of 15
Finish Sub-Test 1...

FInd out what you're really like by answering a series of probing questions in *Personality Test.*

shareware personality profiler claims that it enables you to take an in-depth look at the real you. The danger of the program is that you'll not only discover what kind of self-image you have, but what people actually think of you!

The first two stages of the questionnaire are multiple choices – 15 questions, each with four statements to choose from. You select which of the statements applies most to your way of thinking and which is least applicable. Some of the options are difficult to answer honestly, because either all or none of the offered statements ring true, so unfortunately you'll have to compromise. The third section offers you a list of people to invite to a dinner party – included in the list are Hitler, Churchill and Ronald Reagan. The final section gives you a list of careers – again, you have to select those that appeal to you. A click of a button later and a detailed profile of your personality flashes before your eyes.

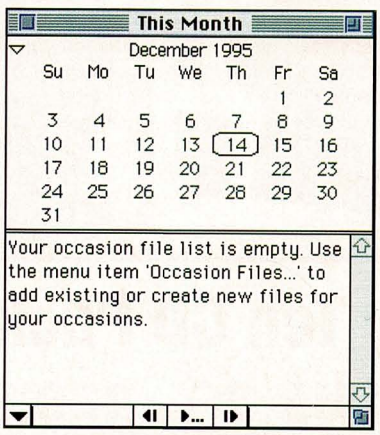
Three of the MACFORMAT team tried it out and got almost completely identical results, with the somewhat ambiguous statement 'Sex is the common denominator' tucked away in the middle of the profile – so either they're sex-crazed clones or the profile isn't particularly reliable. Hmm. The printed report gives a general answer which is broad enough to apply to just about anyone, so you should take the analysis with more than a grain of salt.

Remember? 2.5.1

PERSONAL ORGANISER

Shareware, registration fee $20

Another chance to get your life in order, *Remember?* is a basic diary-based program in which you enter details of appointments and the like in a small text box. When you get to the big day and you switch on your Mac, up pops a reminder not to forget your beloved's birthday, or to buy tickets for Wigan Athletic versus Southend United. It's easy to use and does a simple job well. It's not the most powerful of organiser packages, however, and there are other shareware organisers that are far more flexible with a lower registration fee. **MF**


This Month
December 1995
Su Mo Tu We Th Fr Sa
1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
Your occasion file list is empty. Use the menu item 'Occasion Files...' to add existing or create new files for your occasions.

Remember? – software that helps you plan your life. You just have to remember which folder you put it in.

WHERE TO FIND THEM

We often get calls from readers who want to know how to get hold of some of the shareware reviewed in these pages. Well, here are some of the best methods:

1. Buy the CD-ROM edition of MACFORMAT. All the shareware we review in each issue is on the CD in a separate folder. There's also loads of other shareware on the CD every issue, conveniently sorted into categories.

2. Write to a shareware dealer; they occasionally advertise in the back of MACFORMAT. The dealer should have the program you're looking for, especially if he subscribes to our CD-ROM edition.

3. Use the Internet, if you have access. One of the best sources around is Imperial College at **src.doc.ic.ac.uk.** Use ftp to connect (login: anonymous; password: your e-mail address) and cd to **computing/systems/mac.** We use the umich directory, but sumex is fine as well.

4. Local user groups often have libraries of shareware. Take a look at our Reader Ads section (page 128) to see if there's one near you.

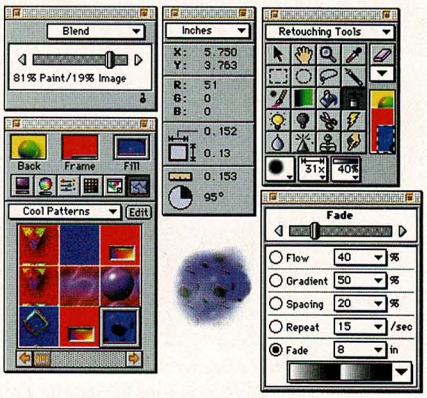
Wherever you get your shareware, beware of viruses. *Disinfectant 3.6* is the best and cheapest way of staying safe – it's on the Cover CD.

MACFORMAT OFFERS

MACFORMAT offers you the best Mac products at the best prices. All prices include VAT and delivery – no hidden extras! Don't miss out on some great deals – order now by mail or phone 01225 822511.

COLOR-IT!™

Version 3.0.4



If *Photoshop* is beyond your budget, then the latest version of *Color It!* is a serious alternative.

3.0.4 special upgrade offer

We gave away *Color It! 2.3.5* on MACFORMAT 31's Cover CD-ROM and floppy disk (if you missed it, see over the page to order your copy). Now we bring you the exclusive chance to upgrade to the NEW *Color It! 3.0.4*, to give you image editing features that are on a par with those of the mighty industry standard, *Photoshop*. This latest version of *Color It!* offers a range of new, powerful features, including:

- Fully-native PowerPC version
- CMYK four-colour separation
- RGB channel editing
- Extrude and drop shadow filters
- User-defined Undo levels (up to 16)
- Levels and Curves filters
- Unsharp Masking filters
- Bezier Brush tool
- Kernel Brush tool
- Crop tool
- Live filter previews
- Palettes combined to save screen space

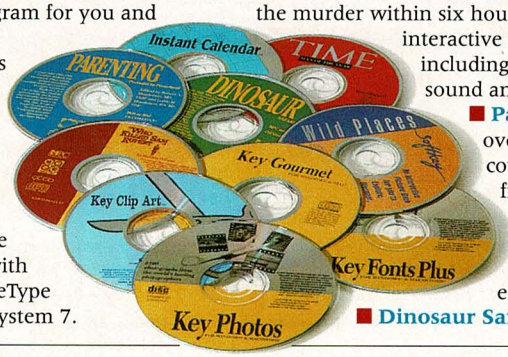
... and much more.

Color It! has come a long way – version 3.0.2 rated a storming 88% in MACFORMAT 28. So don't miss out on this opportunity. Available nowhere else in the United Kingdom, the *Color It! 3.0.4* upgrade offer is available from MACFORMAT for a limited period only. It can be yours for only £44.95, inclusive of delivery and VAT.

Price: £44.95
Order code: MCFCT3

SoftKey Ten CD Pack – ten CDs for only £29.95!
Fonts, clip art, games, edutainment, and more

- **Key Home Gourmet.** A sophisticated and powerful cooking program for you and your Mac.
- **Key Clip Art.** Gives you a library of 5,000 quality TIFF images to copy into your own documents.
- **Key Fonts Plus.** 303 fonts to enhance your documents. These fonts are compatible with the PostScript and TrueType format supported by System 7.

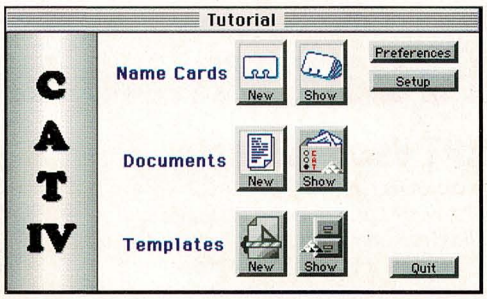


- **Who Killed Sam Rupert?** Can you solve the murder within six hours? This game uses interactive multimedia, including full motion video, sound and animation.
- **Parenting.** Includes over 400 images covering everything from fertility to childbirth! Features a complete medical guide and emergency section.
- **Dinosaur Safari.** Find out all about dinosaurs, geography, flora, fauna and geology. It's an interactive learning game that the kids are bound to love.
- **Instant Calendar.** Use *Instant Calendar* to keep track of meetings, appointments, birthdays and other events.
- **Wild Places.** 100 scenes of beautiful North American Landscapes accompanied by original audio clips.
- **TIME: Man of the Year.** Some of the most influential people of the 20th century.

SoftKey Ten CD Pack
Price: £29.95
Order code: MCF10C

C•A•T 4

MACFORMAT EXCLUSIVE OFFER

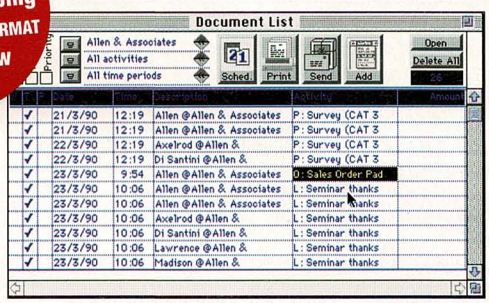


Save £33 off the normal selling price!

C•A•T 4 is an off-the-shelf relational database offering word processor, DTP and spreadsheet functionality – it's the ultimate contact manager for your company, and can be tailored to meet your specific needs. It can even create documents linked to its built-in time management feature.

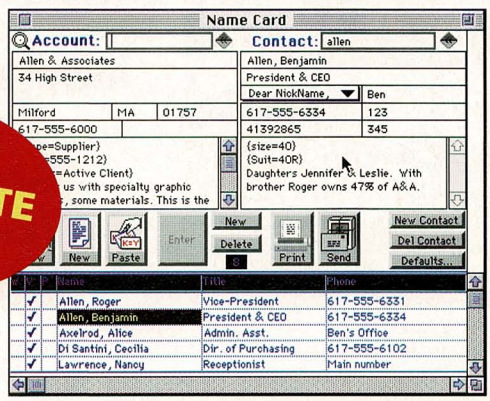
C•A•T 4 rated a whopping 81% in MACFORMAT 32's review

C•A•T 4 offers seriously impressive filing and retrieving abilities. All the documents (letters, invoices, call logs, etc) that you create are filed automatically by time and date, to each contact you communicate with. This enables you to review, at any time, a full history or single item of correspondence with any company or individual. Anyone with professional, business, or personal requirements can benefit significantly from *C•A•T's* ability to display all your communications quickly and easily, whether written, spoken or faxed.



Because the software is so versatile, a customised solution can be developed cost effectively to suit any business, no matter how large or small. All it requires is the production of document templates specific to the job function. Examples of what it can successfully manage include:

- Sales & marketing tracking
- Architecture project management
- Time and job costing recording
- BS5750 administration control
- Designer job bag system



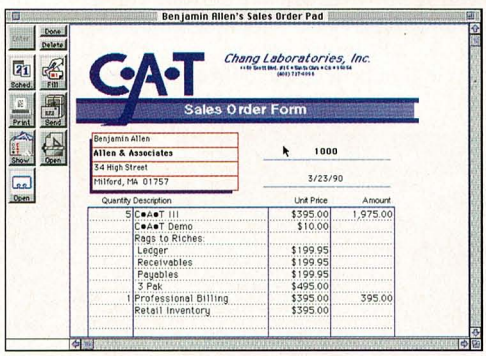
FREE TEMPLATE DESIGN

There's a 90-day fully functional version of *C•A•T 4* on MACFORMAT 32's Cover CD, so you can take a look for yourself to see just how powerful the software can be.

Free template design!

To ensure that you get started with *C•A•T* quickly and with a minimum of fuss, the makers of *C•A•T* are offering two hours of free template design for every new MACFORMAT buyer who purchases the full version. Simply fax over your template designs and they will be put together and returned on disk.

Once you have *C•A•T* installed, you will never again have an excuse for missing an appointment or deadline, leaving invoices long overdue, forgetting to make a follow-up call, or losing correspondence. With *C•A•T* organising your administration you'll see increased efficiency and profitability almost immediately. Take advantage of this special MACFORMAT offer and you can buy *C•A•T* for only £189 – a saving of more than £33 on the normal selling price. You'll also be able to make use of the *free* template design service to set *C•A•T* up to work the way you want.



C•A•T 4 **Order code: MCFCAT4** **Price: £189**

ALL PRICES INCLUDE VAT & DELIVERY – NO HIDDEN EXTRAS
ORDER NOW! CALL THE HOTLINE ON 01225 822511

ClickArt 25,000 Image Pak

Reviewed on page 89 of this issue of MACFORMAT, this is the ultimate clip art collection, with a portfolio of 25,000 images covering 125 diverse categories and styles packed onto four CDs. The images are designed to print at high resolution in colour or black and white. You can locate pictures quickly and easily using the FREE *Kudo Image Browser*. ClickArt's *Incredible 25,000 Image Pak* requires a Mac II or higher, 4Mb of RAM, CD-ROM drive, laser or other PostScript-compatible printer, and System 7 is recommended.

Also includes:

- FREE 1,000 TrueType fonts
- FREE *ClickArt Design Handbook* packed with tips and a visual index of all the images.

Price: £46.99 (includes VAT and delivery)
Order code: MCFCAP

Great value with our KPT Offers

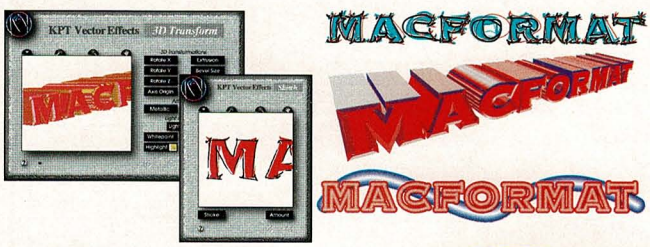
KPT Vector Effects

(MACFORMAT 29: 92%)

ONLY £99 plus VAT

KPT Vector Effects does for *FreeHand* and *Illustrator* what *Kai's Power Tools* did for *Photoshop* – it adds a brilliant new dimension to both of these programs, enabling you to easily create stunning 3D effects. Using the innovative interface you can rotate, swivel, bend and alter the look of any object, including text, to whatever you want. You'll find a full review of *KPT Vector Effects* in issue 29 of MACFORMAT, where it scored 92%.

KPT Vector Effects **Price: £116.32**
Order code: MCFKVE

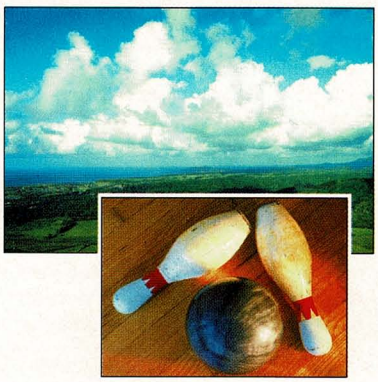


KPT Power Photos

(MACFORMAT 28: 89%)

ONLY £99 plus VAT

This excellent collection of high resolution photos features 500 images, across a total of ten CDs. Each photo is provided in TIFF format, making it compatible with almost all programs. At resolutions of 2,048 x 3,078, the photos can be used at A4 size, providing stunning and interesting pictures, suitable for all users, from home to professional. For a complete review, see MACFORMAT 28, where it received a rating of 89%!



KPT Power Photos
Price: £116.32
Order code: MCFKPP

KPT Bryce

(MACFORMAT 20: 91%)

SAVE OVER £35 ON RRP

Produce incredible landscapes on your Mac using *KPT Bryce*. You have complete control over the shape and form of your terrain. Clouds obey your every mouse-click and a violent thunderstorm can be conjured up in seconds. Miraculously journey into outer space; visit unknown planets and their mysterious moons.

Once you've started to use this software you'll be unable to stop creating wonderful graphics – it's that compulsive. Reviewed in MACFORMAT 20, *KPT Bryce* scored an impressive 91%. *KPT Bryce* requires an LCII or better, 4Mb of free RAM, and System 7 or later.

KPT Bryce **Price: £115** **Order code: MFKPT**

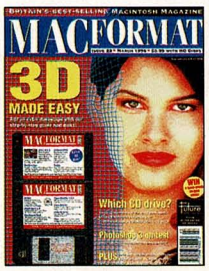
HSC Tips and Tricks CD and KPT Power Photos Digital Catalogue CD

FREE these two CDs when you buy any *KPT* product here

Every purchase of a KPT product from these pages comes with two Kai Krause CDs. *HSC Tips* provides demo filters, sample images and great ideas. The *Digital Catalogue* contains samples of volumes one to five of the *KPT Power Photos* collection (rated 89% in MACFORMAT 28) and high res photos for your own use.

ALL PRICES INCLUDE VAT & DELIVERY – NO HIDDEN EXTRAS
ORDER NOW! CALL THE HOTLINE ON 01225 822511

MACFORMAT Back Issues Complete the set – only £5 each, including p&p.



ISSUE 22

March 1995

■ **On the disks:** *Infini-D* demo; *MacConcept; Blobbo*

■ **On the CD-ROM:** 3D spectacular; *The Crystal Rainforest; VideoFusion*

■ **Inside:** how to create 3D images on your Mac; *Photoshop 3.0* reviewed; font problems solved; CD-ROM drives tested; and the most realistic flight sim ever

Order codes:

CD-ROM	MFCD22
HD Disk	MFHD22

ISSUE 23

April 1995

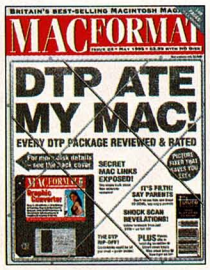
■ **On the disk:** *Oh-no! More Lemmings; StuffIt Lite 3.5*

■ **On the CD-ROM:** comics collection; *PAWS; Sources of Faith; Marathon*

■ **Inside:** comics on the Mac – interviews, reviews and how-to's; *FreeHand* vs *Illustrator;* colour printers; reviews of *XRes* and the best Mac game ever – *Marathon*

Order codes:

CD-ROM	MFCD23
HD Disk	MFHD23



ISSUE 24

May 1995

■ **On the disk:** *Graphic Converter; MacCheckers!*

■ **On the CD-ROM:** demos of five top DTP programs, including *QuarkXPress* and *PageMaker,* plus *Photoshop 3.0* and *ClarisWorks 3.0*

■ **Inside:** every Mac DTP package reviewed and rated; colour scanners; networks explained; *PhotoFix* reviewed

Order codes:

CD-ROM	MFCD24
HD Disk	MFHD24

ISSUE 25

June 1995

■ **On the disk:** *Knot 1; MacSnails; Glypha 3, TypeIt4Me, Electric Poet* and MIDI files

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** all you need to know about PowerMacs, fax-modems tested; plus some 'Cosmic' CD-ROMs

Order codes:

HD Disk	MFHD25

ISSUE 26

July 1995

■ **On the disk:** animation programs, *Disinfectant 3.6*

■ **On the CD-ROM:** demos of *ProMotion, Amazing Animation, Elastic Reality, Morph* and *Circus,* plus *3D Dinosaur Adventure.*

■ **Inside:** animation on the Mac; 15- and 17-inch monitors reviewed; comms made easy with *TeleFinder*

Order codes:

CD-ROM	MFCD26
HD Disk	MFHD26

ISSUE 27

August 1995

■ **On the disk:** *Anagrams, Word Breaker, Smart Calendar, Xearth* and *BattleTanks*

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available

■ **Inside:** the complete guide to portable Macs; Internet basics series; plus portable printers reviewed.

Order codes:

HD Disk	MFHD27

ISSUE 28

September 1995

■ **On the disk:** *Catch The Buzz, Lobster, DragThing.*

■ **On the CD-ROM:** *Color It!, Dark Forces, Circle Elements* and *WorldWrite* demos, plus over 75 high-res clip photos.

■ **Inside:** image editing; what those Extensions and Control Panels *do*; graphics tablets, PaperPort scanner and *Dark Forces* reviewed.

Order codes:

CD-ROM	MFCD28
HD Disk	MFHD28

ISSUE 29

October 1995

■ **On the disk:** clip art, games and utilities, fonts.

■ **On the CD-ROM:** clip art, 55 high res photos, Bomb Busters, *Discworld* demo.

■ **Inside:** eye-catching black-and-white DTP; clip art collections, *KPT Vector Effects,* language learning software and multimedia encyclopaedias reviewed.

Order codes:

CD-ROM	MFCD29
HD Disk	MFHD29

ISSUE 30

November 1995

■ **On the disk:** *MacPipes, MacQubic, Gossamer.*

■ **On the CD-ROM:** HTML authoring software, *QuickEditor,* QuickTime 2.1, *SmartSketch* demo.

■ **Inside:** publishing on the Net and CD-ROM, QuickTime utilities, *Alone in the Dark, SmartSketch,* input devices – alternatives to the mouse.

Order codes:

CD-ROM	MFCD30
HD Disk	MFHD30

ISSUE 31

December 1995

Double-disc special!

■ **On two disks:** *Color It! 2.3.5* – full version, *Factory*

■ **On two CD-ROMs:** *Color It! 2.3.5* plus fonts, clip art, and more. *Acrobat Reader.*

■ **Inside:** 50 ways to make your Mac run faster, *ClarisWorks 4, Doom 2, SoftWindows,* personal organisers, programming.

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ISSUE 32

Christmas 1995

■ **On the disk:** *Pentominoes, Frog Xing, Xmas Lights, FindText 1.3,* utilities.

■ **On the CD-ROM:** *Marathon 2,* QuickTime VR, *C•A•T 4,* art software, multimedia.

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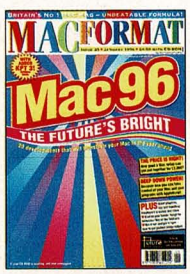

ISSUE 33

January 1996

■ **On the disk:** *Eclipse 3, Altair 2, Gravity Balls 1, TextBrowser 1.1, Aaron...*

■ **On the CD-ROM:** *Doom, Descent, Voodoo Lounge,* education demos and more.

■ **Inside:** what's happening on the Mac in 1996, *KPT 3, Day of the Tentacle, Aladdin, Session 2,* guide to buying a Mac setup.

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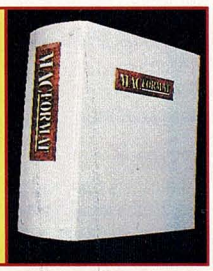

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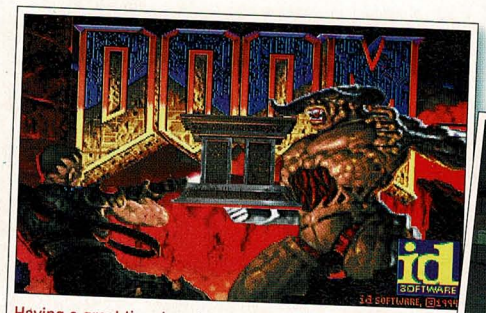
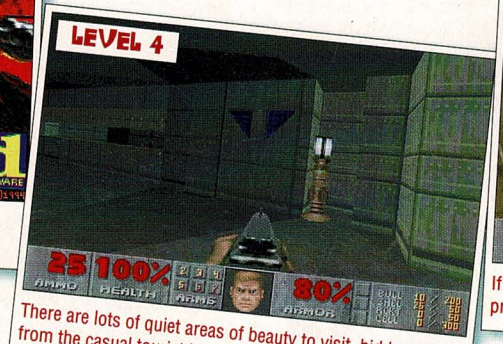
POSTCARDS FROM HELL

Gamebusters

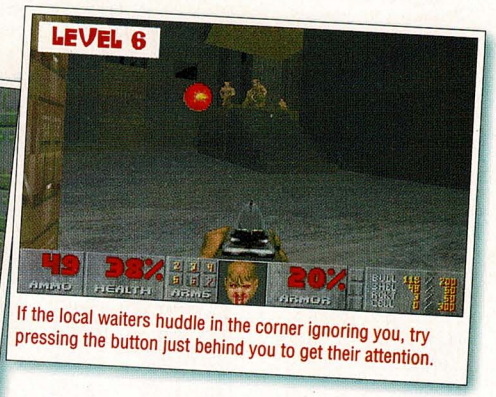
Derek Smith spent his Christmas holidays in *Doom 2* Hell. Here are the slightly singed postcards he sent back to the office.



Having a great time here in Hell. I'll send you a postcard every day of some of the interesting places to visit.



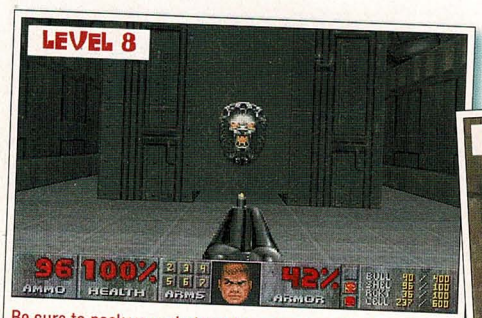
There are lots of quiet areas of beauty to visit, hidden away from the casual tourist by secret doors like this one.



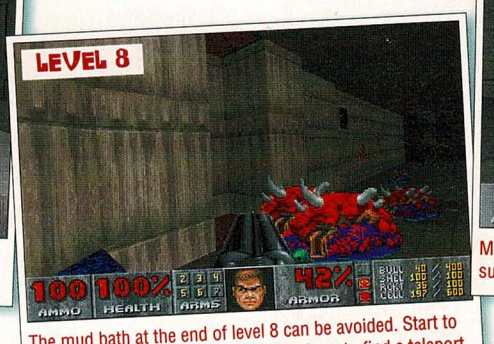
If the local waiters huddle in the corner ignoring you, try pressing the button just behind you to get their attention.

OPTIONS

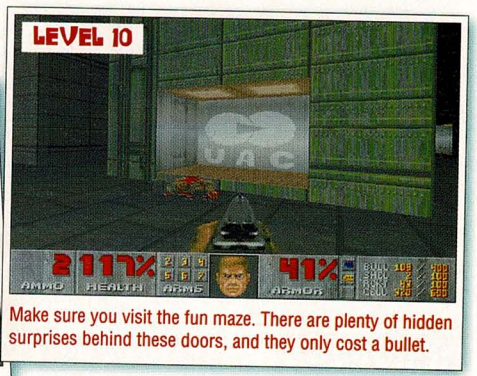
Doom 2 has a confusing set of options – not because there are too many, but because you access some of them from pull-down menus, some by pressing **[esc]** during play, and some by holding down **[S]** or **[M]** when the game is loading.



Be sure to pack your shotgun for moments like this. Shoot the door and go through before using the other teleports.



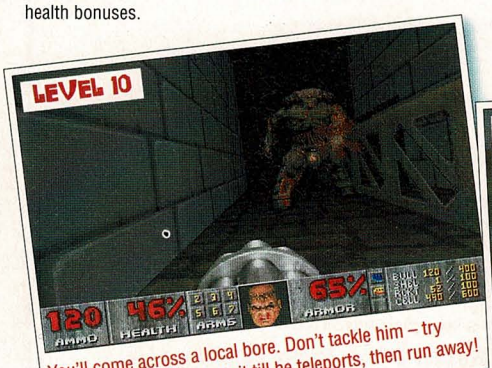
The mud bath at the end of level 8 can be avoided. Start to enter the final room, then sneak back here to find a teleport.



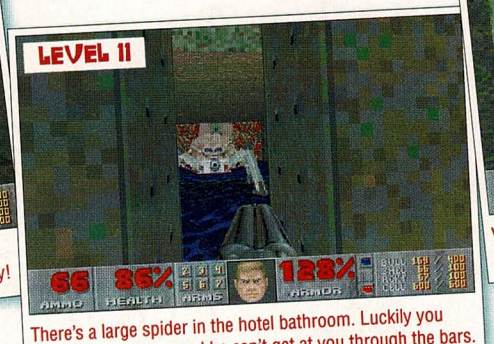
Make sure you visit the fun maze. There are plenty of hidden surprises behind these doors, and they only cost a bullet.

DIFFICULTY

Selecting the easiest difficulty setting means that you finish the game too quickly. Try playing on Hurt Me Plenty. It offers the ideal balance between lots of extra baddies and health bonuses.

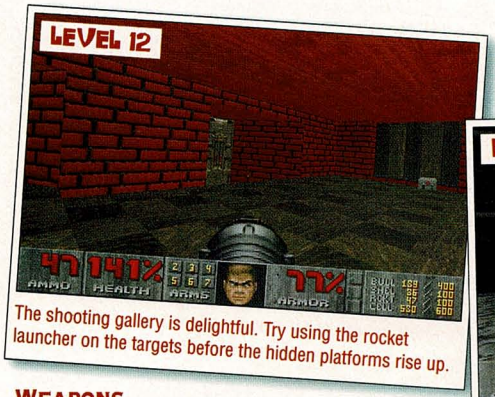


You'll come across a local bore. Don't tackle him – try some clever footwork, wait till he teleports, then run away!

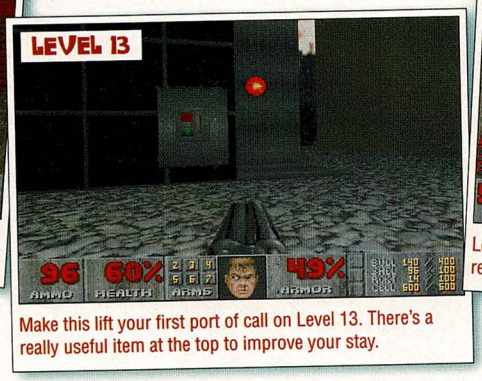


There's a large spider in the hotel bathroom. Luckily you have your shotgun, and he can't get at you through the bars.

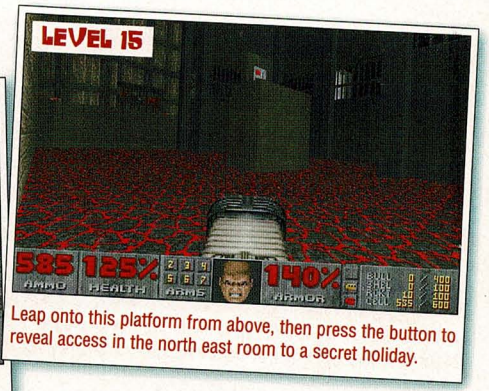
Visit the gym. Press this button, take the lift down, then run around to the other side of the room – but be quick.



The shooting gallery is delightful. Try using the rocket launcher on the targets before the hidden platforms rise up.



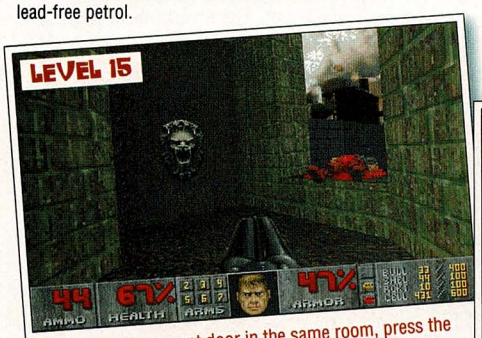
Make this lift your first port of call on Level 13. There's a really useful item at the top to improve your stay.



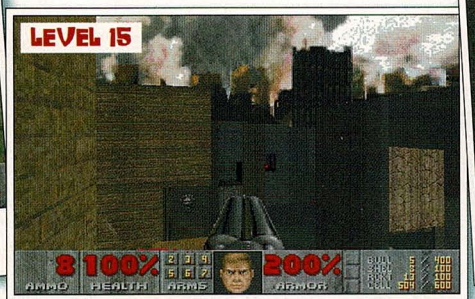
Leap onto this platform from above, then press the button to reveal access in the north east room to a secret holiday.

WEAPONS

Unless you're playing on the easiest settings, ammo conservation is an important environmental issue. Use the low-lead pellet shotgun for Zombies and Imps, and don't forget to use the humble chainsaw, running on lead-free petrol.



To open another secret door in the same room, press the ornate stone carving, sculptured by a talented local artist.

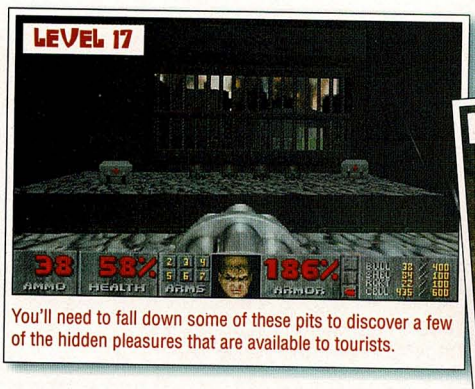


Hang-gliding lessons aren't available in the package deal, so you'll need to perform a leap to reach that switch.

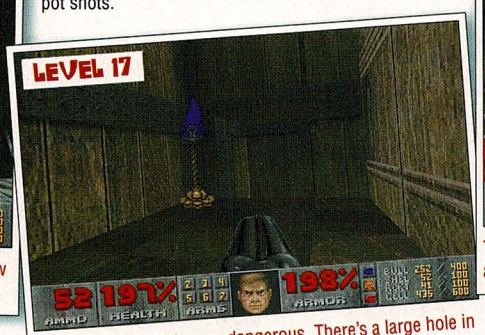
When visiting the wooden theme park, take a trip down this hole for a rollercoaster ride to weapons and adventure.

SIDESTEP

If you want to live long enough to play in the big league, then you'll need to get used to using the sidestep motion to hide behind pillars, only jumping out to take pot shots.



You'll need to fall down some of these pits to discover a few of the hidden pleasures that are available to tourists.

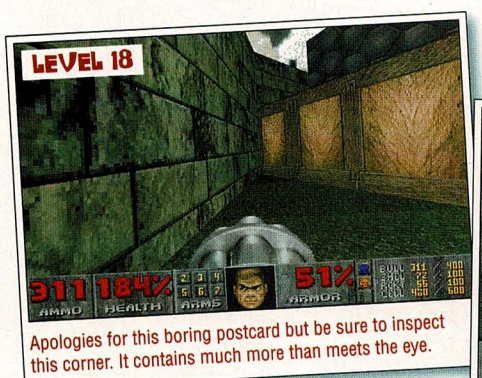


The lift on level 17 is very dangerous. There's a large hole in the wall as you go up. Someone might fall through that.

Take some spare ammo with you to open this secret door and see some of the local wild life. Actually, he was livid.

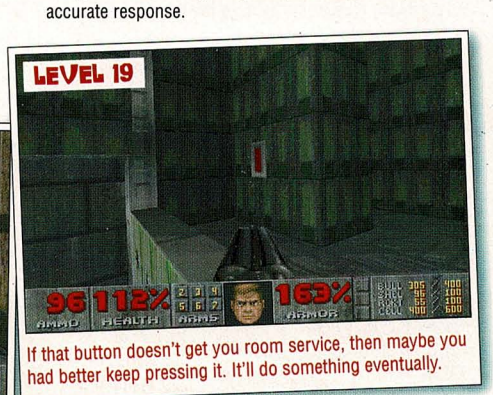
CONTROLS

The best set of controls is a very personal choice, but don't ignore using the keyboard. You might find that using the numeric keypad gives you the quickest, most accurate response.



Apologies for this boring postcard but be sure to inspect this corner. It contains much more than meets the eye.

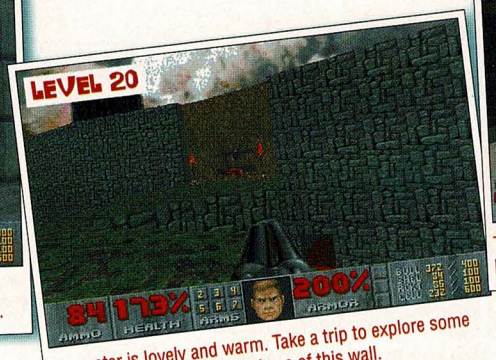
Deep in the ancient ruins on level 19 there's a secret door that leads to a sweet little butcher's. Be sure to visit.



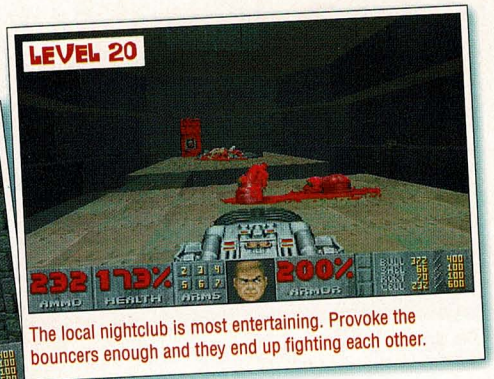
If that button doesn't get you room service, then maybe you had better keep pressing it. It'll do something eventually.

Continued on next page

A secret door to the beach lies to the left of this passage. Make your way there quickly before all the deck chairs go.



The water is lovely and warm. Take a trip to explore some secluded caves down at the base of this wall.

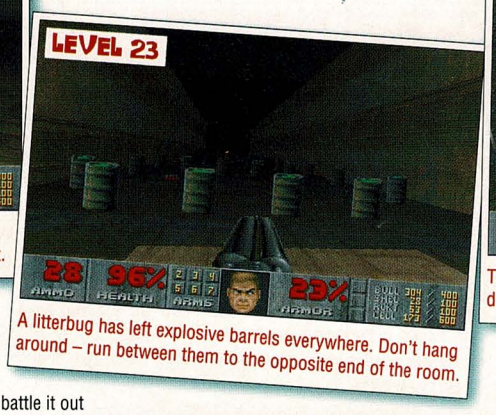


The local nightclub is most entertaining. Provoke the bouncers enough and they end up fighting each other.

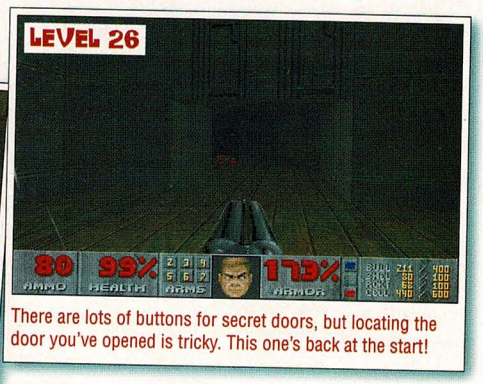
SPEED

To increase the speed and smoothness of the game, start with Extensions off (hold down **[shift]** during startup), though you'll lose the music, which requires QuickTime. Also, select **Kill Finder** from the **Options** screen, which you access by pressing **[S]** when loading the game.

One of those museums where you get to press buttons. Press all four to raise a platform and activate it to get a lift.



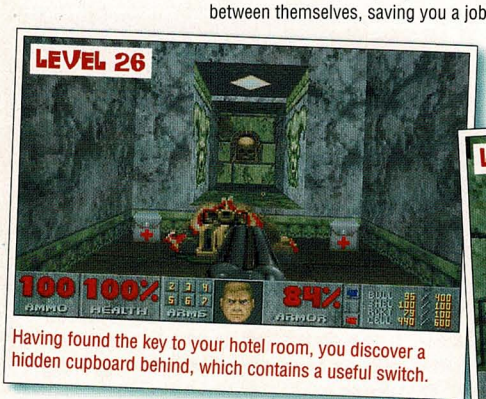
A litterbug has left explosive barrels everywhere. Don't hang around – run between them to the opposite end of the room.



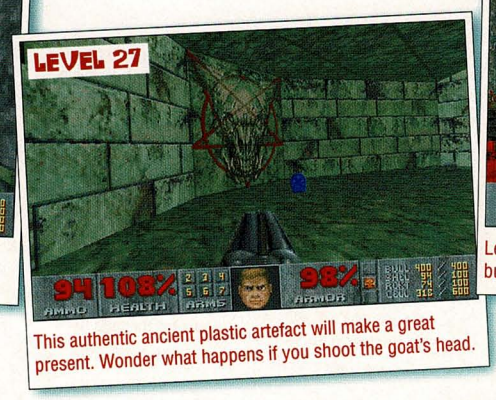
There are lots of buttons for secret doors, but locating the door you've opened is tricky. This one's back at the start!

HEADLESS CHICKEN

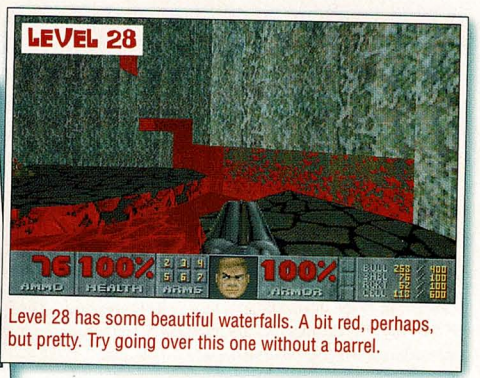
Perhaps the most important tactic is to get the baddies to shoot each other. When this happens, they will battle it out between themselves, saving you a job and some ammo! On levels with open spaces and lots of baddies, use the Run key, usually **[shift]**, to run about like a headless chicken causing lots of friendly fire hits for the enemy.



Having found the key to your hotel room, you discover a hidden cupboard behind, which contains a useful switch.



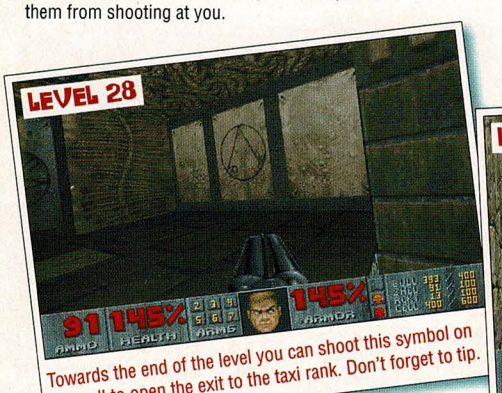
This authentic ancient plastic artefact will make a great present. Wonder what happens if you shoot the goat's head.



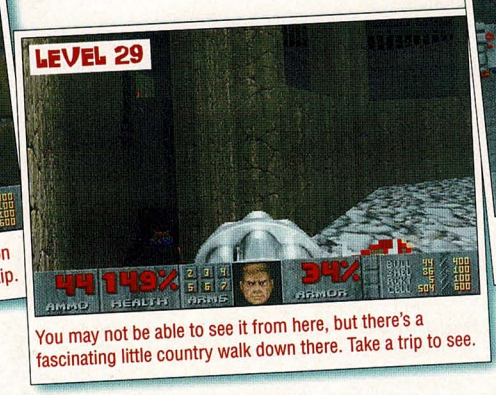
Level 28 has some beautiful waterfalls. A bit red, perhaps, but pretty. Try going over this one without a barrel.

FLYING NIGHTMARES

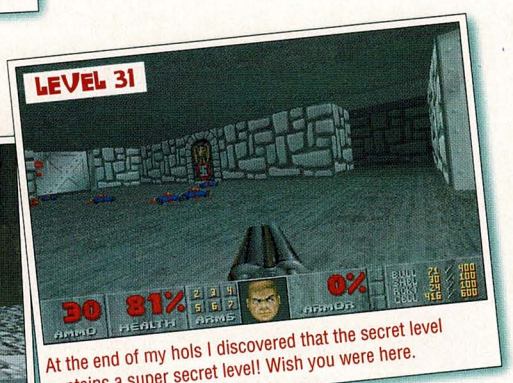
The chaingun is probably the best weapon for tackling flying baddies, as its rapid fire stops them from shooting at you.



Towards the end of the level you can shoot this symbol on the wall to open the exit to the taxi rank. Don't forget to tip.



You may not be able to see it from here, but there's a fascinating little country walk down there. Take a trip to see.



At the end of my hols I discovered that the secret level contains a super secret level! Wish you were here.

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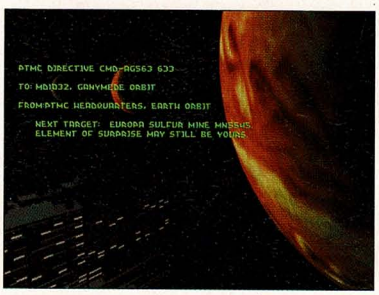
Descent

There's a *Descent* demo on MACFORMAT 33's CD. Order a copy from page 115

It's PowerMac-only, but then it does boast the most sophisticated graphics engine ever seen in a game. But is it fun to play? Derek Smith gives it a blast.

Take one *Doom* clone, mix together with a flight simulator, add a pinch of science fiction, leave to mature on the PC for a few months, then release on the Mac. You now have *Descent*.

Descent emerges from the tradition of blast-'em-ups, but with an important difference. *Doom* was the original virtual reality shooting gallery, but was two dimensional. *Marathon* and *Dark Forces* enabled you to look up and down, but only to a point. You couldn't look at your feet or into the sky, but with *Descent* you can – not that you have feet, or sky.


ATHE DIRECTIVE CMD-AGS63 633
TO: MDI032, GANYMEDE ORBIT
FROM:ATHE HEADQUARTERS, EARTH ORBIT
NEXT TARGET: EUROPA SULFUR MINE MNES45
ELEMENT OF SURPRISE MAY STILL BE YOURS

At the start of each mission you get an extensive briefing that goes something like 'Um… fly around and shoot things. Good luck.' Gee, thanks.

You control a small spaceship that has complete freedom of movement in all directions, rather like a flight sim. However, in a flight sim your movement is limited only by a maximum altitude and the aerodynamically challenging ground. *Descent* puts you in a claustrophobic *Doom*-like world of passageways, rooms, doors, and walls.

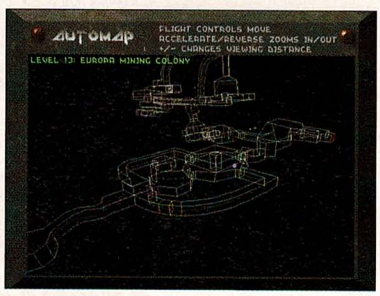
Imagine this. You fly along a passageway that suddenly comes to an apparent end. You rotate the image on the screen to face directly upwards, and see that it continues like a chimney. So off you go again, but of course it doesn't feel like you're going up because the world rotates around you.

Now imagine this. You enter a large room. Two blue laser flashes from over your shoulder indicate you're not alone, so you fly upwards while rotating left to put the enemy ship in your sights. A couple of bursts from your laser cannon destroys him, but gains the attention of more baddies. You make for an exit in the floor, roaring down a tunnel that curves through a 90-degree turn. The passageway forks, so you go left. Explosions from behind indicate you haven't shaken them. You emerge into a large cavern, fly forwards, and do a graceful loop to head back the way you came. Your pursuers belt around the corner, not expecting to see you with your cannons on full fire bearing down on them. Game over, suckers.

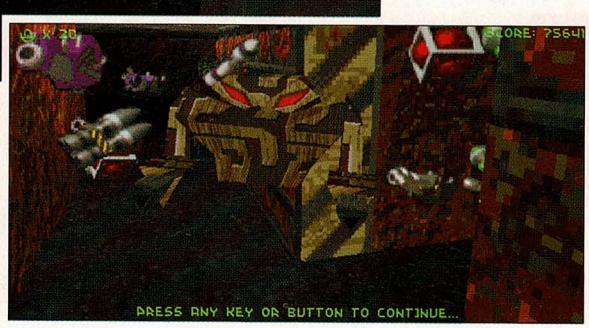
This sort of gameplay is what makes *Descent* such a revolutionary game, and is also why it's PowerMac only. On a Quadra, the graphic quality would be dismal. On a PowerMac, not only can you manoeuvre like a bird, but the enemy ships are made from polygons, as they are in a flight sim. This means that although they look fairly simple, they turn and fly incredibly smoothly.

NETWORKING

Up to eight people can play against each other on PowerMacs and PCs as long as you have EtherNet. For PowerMacs connected via LocalTalk the maximum number is three players.



If you have trouble trying to follow a road map, just wait until you meet this 3D version. You've just missed the Reading exit.



When you're killed, the camera perspective changes to outside your craft so you can see yourself dying. Like that's really going to make you feel better.

Plot? What plot?

The plot involves ridding mines from alien space ships, but as with all of these games, it's pretty much optional. You fly about the mines, with the aim of finding and destroying the main reactor in an attempt to vapourise the entire mine, thereby denying it to the aliens. Possibly an extreme attitude, but it makes for a good end-of-level sequence. The game is reminiscent of the scene at the end of the last *Star Wars* film, *The Return of the Jedi*, when the Millennium Falcon flies into the Death Star to destroy the core.

Before you reach the reactor, there are baddies to be shot and hostages to be rescued. You'll doubtless be awestruck by the graphics as you blast through the first few levels, and you'll find that flying down corridors, rotating in all directions and battling alien space ships is ripping good fun, but after a while you'll notice that level four is very like level three. So's level five, and six.

It gets very repetitive. Each level looks the same and plays the same. Although there are lots of alien spaceships, they all look similar – the only real difference between them is the number of shots it takes to destroy them. With *Doom* and *Marathon*, each level is truly memorable, with its own look and feel. Not *Descent*.

The hostages seem to be have been thrown in at the last minute as a feeble gesture towards gameplay. There's really no incentive to rescue them other than a score bonus, and who gives a hairy hamster about scores? It's just a shame that a dedicated team of programmers spent so long creating such

The guys above don't pack much of a punch, but when destroyed they turn into four smaller and more agile ships (right).

That purple blob makes you invisible. Unfortunately, those aliens saw you taking it.

Whooosh, swoop, roar, blam, kaboom. You got the guy with the deadly onomatopoeia gun.

This hostage is grateful because you've just taken out ten baddies to get here. Of course, all you want is the health bonus – he can take his blue overalls and get stuffed.

These ships are only armed with chain guns, but they regularly hunt in pairs and always manage to get the first shot in.

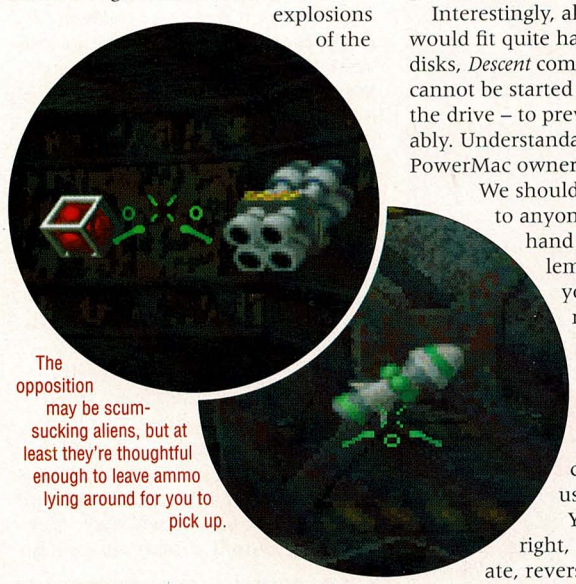
an attractive game that ultimately has so little personality.

When it comes to music, *Descent* gives you limitless choice. You can listen to Meat Loaf as you blast your way about, or Vivaldi, should you choose, or even a whale song, if that's your thing. You simply put your choice of audio CD in the drive and it plays the tracks along with the whooshes and explosions of the game. If you don't have any CDs, *Descent* provides 14 music tracks for you to choose from.

Interestingly, although the game would fit quite happily on floppy disks, *Descent* comes on CD, and indeed cannot be started without the CD in the drive – to prevent piracy, presumably. Understandable, but a shame for PowerMac owners without CD drives.

We should also issue a warning to anyone who has eye to hand coordination problems. To fly your ship, you'll need to use the majority of keys on the keyboard, and although you can use the mouse or joystick, they are rendered useless because you still need to use the keyboard a lot. You can bank left, right, up or down. Accelerate, reverse, rotate left, rotate right. Slide left, right, up and down, fire primary weapon, fire secondary weapon, and swap between all ten weapons. But getting used to all the controls pays dividends. You might be chased down a passage by a huge baddie, pass over a hole in the floor, sink down into it, turn around, select the super duper really big gun, rise up, and blast him to bits – just like Kirk against Khan at the end of the second *Star Trek* film.

Descent is a technically superb, groundbreaking game that is thrilling to play. Just seeing what your Mac can do will keep you hooked for a while. But what it really needs is a big extra dollop of gameplay and a generous seasoning with variety. **MF**



The opposition may be scum-sucking aliens, but at least they're thoughtful enough to leave ammo lying around for you to pick up.

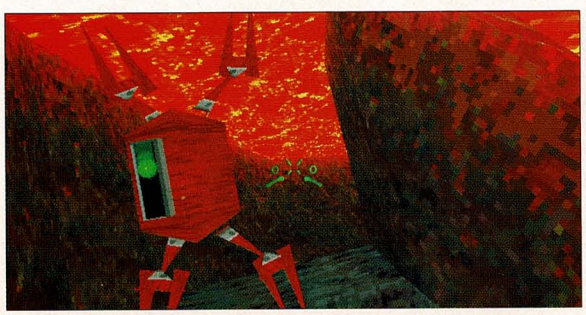
DESCENT

Price: around £40. **Out:** now.
Requires: PowerMac, 6.3Mb of free RAM (8.7Mb recommended, but works with Virtual Memory), 17Mb of hard disk space, CD-ROM drive, 13-inch colour monitor.
Contact: Interplay on 01235 821666.

GRAPHICS Repetitive, but awesome.	91%
SOUND You can use any audio CD – a brilliant idea worthy of copying.	92%
GAMEPLAY Immense fun but no variety.	75%
MACFORMAT RATING	87%

DESCENT 2

The sequel to *Descent* is about to fly onto the screens of PCs. Interplay haven't committed to converting it to the Mac, but chances seem good as long as *Descent* sells well.



Wait a minute, the ceiling is made of lava. That can only mean one thing – they have built the mine upside down. 'Right way up' is relative in this game.

The end-of-level scene is a real-time rendering of you escaping the mine just in front of the wall of fire. Oooh, pretty.

Havoc

You can find a fully interactive demo of *Havoc* on the Cover CD this issue

Playing *Havoc* is doing just that to people's productivity all over the country. James Flynn falls into the trap of playing it and finds himself addicted.

Marathon heralded the Mac's coming of age as a serious action games platform – it was the first Mac-only game to offer fast 3D graphics with compelling gameplay to all users, even those with lower-end machines. *Havoc,* with its smooth, stylish battle racing action, is the latest in an increasingly long line of worthy successors.

Many games initially impress, only to disappoint when it comes to playing them. *Havoc* is different. It's far from original, and it's not perfect, but in almost every area it's well thought out and one of a kind on the Mac.

When you start you have the choice of a tank, a bike or a hovercraft with which to take on your enemy. Each spins prettily in real time and all have different armour, speed and weapons characteristics. The game is divided into levels; within each you must collect the gate key and locate the gate to progress to the next level. All levels are gently undulating plains, with cliff faces and canyons to impede your complete freedom. There is some hackneyed storyline in the excellent manual about having to overthrow tyrannical corporate warlords, but you tend to forget about the political nuances of your situation when you're about to be vapourised. Locate all three keys on any level and you can advance to a bonus level later.

Scattered around are enemy craft which you must dispatch, plus hostile gun turrets and inoffensive hangars and towers. You are awarded points for everything you shoot (which contribute to bonuses later), while hidden in some of the structures are power-ups, which help you to survive now. The idea is to destroy everything, but preferably to attack those targets that might harm you first. It's unsubtle stuff, which is a shame – some tactical element would have benefited each mission greatly. Why not have certain towers that you must avoid, or home bases or refuelling caches to protect?

But, it must be admitted, zipping around destroying everything in sight is hugely gratifying. Every craft in the game handles differently and you're never left sitting idle. There is a small direction indicator that guides you to your next objective, but the rest's up to you. The wide range of weapons in *Havoc* is excellent and each has its particular uses. The learning curve's perfect – when exactly should you switch to the mortar from the basic laser to take out that installation without leaving yourself open to aerial counter attack? It'll be a while before you've mastered them all.

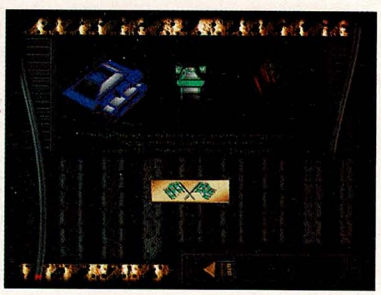
On a non-PowerMac, these textured little red hover-devils (right) will slow your machine right down. The window can become slightly larger, but it's always small.

What remains of a particularly vicious guard turret. Marvel at the bitmapped explosions before moving in and collecting the gate key. Two more of these and you could be on your way to a bonus level.

Speeding

Speed is a prerequisite for any successful action game – without it you feel as if you're sitting in an armchair, rather than blasting across the Fallout Wastelands in a third millennium killing machine. Reality Bytes have wisely included three options to customise the appearance of the screen to suit your demands and your processor's ability. You can select from three levels of landscape shading and texturing, add full texturing to the other vehicles and remove the clouds from the sky.

Havoc is optimised for all PowerMacs. On anything above a Performa 5200 you'll be more than satisfied with the performance – although the smooth shading and external views take their toll. Play it on a 7100/80 and all the detail can be activated, while maintaining a healthy frame rate. Better still, a QuickDraw 3D card installed on your Mac will make *Havoc* even faster. But if you're playing it on



Choose between the tank, the bike and the hovercraft, according to your particular fetish.

More like <No Shields>. Ha ha. The yellow arrow direction indicator says you've found your target, but you probably know that by now.

The other cars are more of a nuisance than something to race against.

The external camera (left insert) looks okay but is useless. Use the map to locate your enemies.

Each of the vehicles has a different cockpit. The shield status bar runs along the bottom, the weapons recharge one runs up the side and the target aquisition window can be replaced by an external camera.

anything less than a PowerMac, you'll have to lose all the texturing to retain enough speed to make the game worth playing. Despite this, the flat shading gives it a certain retro-appeal that reminds you just how far the Mac has come as a games platform in the past 18 months.

Irrespective of which detail setting or Mac you're on, the playing area window size remains small, occupying around 40% of the screen. This isn't as great a handicap as you'd expect. All the scenery fogs in at quite a distance with an unusual pixellation effect that, while at first disconcerting, gradually strikes you as the perfect blend of functionality and aesthetics. The detail in the playing area is crisp, and, even with texturing enabled, there's none of the usual bitmapping blockiness (apart from with explosions) that plagues non-polygon games.

The design of the control panel, so often ill-conceived and detrimental to the overall experience, could not be better. *Havoc* is essentially a simple game, and each craft's instrumentation just features a shield energy bar, several weapon status screens, a 2D map and a direction indicator. It's easy to glance down during a heated battle to check your situation, without having to hunt around for a small but vital percentage indicator buried somewhere amid a wealth of other 'useful' information. If your Mac has the power, a small external camera window can also be added, although it's not much use most of the time.

Life's not fair

Havoc's difficulty level is pitched at the more experienced player, which is unfair at times. At the start of each zone you are given three lives, no matter which of the three settings you are playing on. These aren't replaced when you exit each level, nor are your shields restored completely. Rather, your kill ratios within that level govern to what extent your shields (quite easily the most important factor) are recharged. It's possible to start a tricky level with all of your offensive weapons active, but only 20% of your shield power remaining. Another irritating (and this time inexcusable) flaw is that there are certain areas within the levels where if you fall down it's instant death.

Within each zone, all the levels look similar and the design of each is average at best. There is little to be gained in one player mode from using the scenery to protect you, or to stage ambushes on the characterless other craft flitting about. Lock on your weapons, steam towards one of the wide variety of targets, firing as fast as possible, and collect the power-up if you're lucky. Your craft's collision detection is at times picky – if you try and veer away at the last minute you'll occasionally become stuck on something.

These niggles are cumulatively significant but by no means fatal flaws in what is indisputably a fast, frantic and fun game. *Havoc* also supports a 16-player network option for instant competitive aggression with your mates. Try it, now. **MF**

Make the most of your invulnerability by exposing as many other power-ups in the time available.

A shield activates on an enemy car as you score a direct hit. Most don't take many hits to destroy.

HAVOC

Price: $39.95 plus P&P. **Out:** now.
Requires: Quadra or better (optimised for PowerMacs), 8Mb of RAM, 256-colour monitor, CD-ROM drive.
Contact: Reality Bytes in the USA on 001 617 621 2500 or e-mail rbytes@netcom.com

GRAPHICS 86%
A small window, but its contents are fast and slick.

SOUND 54%
Boring music and functional explosions.

GAMEPLAY 82%
Totally derivative but well balanced and varied. And then there's the network option...

MACFORMAT RATING 82%

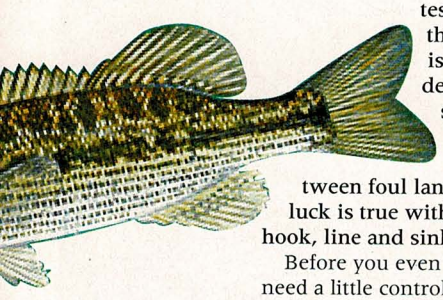
A weapons upgrade helpfully lying in the brown desert. A familiar sight after a few hours of play.

Trophy Bass

Fancy going fishing without getting cold or wet? Cast aside your preconceptions, leave your wellies in the shed, and join in as we try to hook a bass...

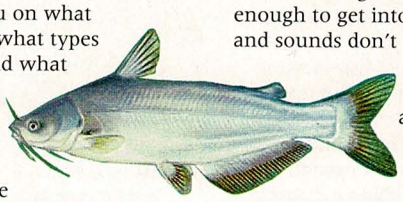
Depending on where you're fishing, how you cast is an important decision. Two-handed gives distance, while side arm is good for accuracy and minimum splash.

There's an old saying: if you swear, you'll catch no fish. Sierra On-Line, in their piscivorian wisdom, have come up with a game that's unique on the Macintosh and enables you to test this wisdom of the ages. *Trophy Bass* is what you might describe as a fishing simulator. The time has come to find out if the link between foul language and bad luck is true with the good old hook, line and sinker.



Before you even start, you may need a little control on the profanity front, particularly if you're the impatient type. *Trophy Bass's* chief fault is that it's so slow. Fishing is, of course, supposed to be slow, but the time it takes for the game to change between screens would test the patience of James and John (or any other saintly fishermen, for that matter).

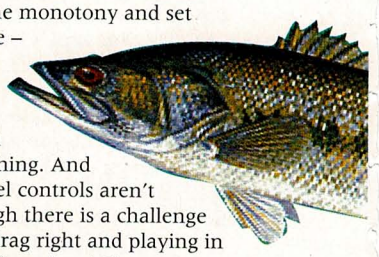
Tardiness aside, *Trophy Bass* manages to be a surprisingly interesting game, even if you haven't a clue about bass fishing in the USA. If you need help, there's a whole multimedia section which advises you on what depths to fish at, what types of lures to use, and what casting styles are most effective given the time of year, water temperature and weather conditions.



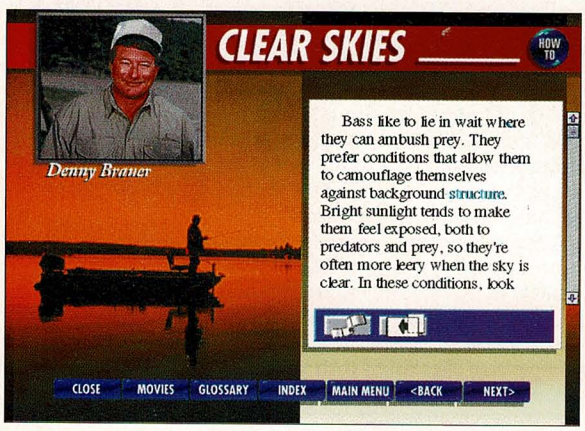
When you're ready to go, you get two options. If you're the competitive type, you might enter a fishing tournament – serious stuff. Tournaments go on at five lakes and have strict rules. Typically, all fish under 1lb must be released, and you're only allowed to bring a certain number to the weigh-in. If you bring in a dead fish, it's an automatic 2oz penalty. So there.

If you're not that serious, the other option is to 'just fish'. Splash – you're on a lake. Having chosen where to fish using a map (and paying attention to the conditions), you have to pick a rod, stick a lure on the line and adopt one of five casting styles. Just to complicate things you have to choose from about seven kinds of lure, in a variety of colours, each of which is meant for a different depth, size of fish and amount of light. If you fish the shallows, you actually get to see the shadowy shapes of fish in the water, and you can click the head of your fishing buddy for advice. He always gives better advice when you're not in tournament mode.

Bass fishing on the Mac is easy enough to get into, but the graphics and sounds don't liven things up a great deal. The graphics are passable, but you might get bored with looking down at murky waters, and the sound is mainly limited to splashing and the odd 'yahoo!' when you hook a fish. More bird sounds and the like would break the monotony and set the atmosphere – but then, you could always try the great outdoors if you want the real thing. And the cast and reel controls aren't perfect, although there is a challenge in getting the drag right and playing in bigger fish (such as that 12lb monster that always breaks your line).



Trophy Bass has three skill levels and diverse waters to keep it challenging. If you have a little patience (swearing does reduce the likelihood of a bite) and fancy going fishing without getting wet or bringing home dinner, then buy this game. **Garrick Webster**


CLEAR SKIES
HOW TO
Denny Brauer
Bass like to lie in wait where they can ambush prey. They prefer conditions that allow them to camouflage themselves against background structure. Bright sunlight tends to make them feel exposed, both to predators and prey, so they're often more leery when the sky is clear. In these conditions, look
CLOSE
MOVIES
GLOSSARY
INDEX
MAIN MENU
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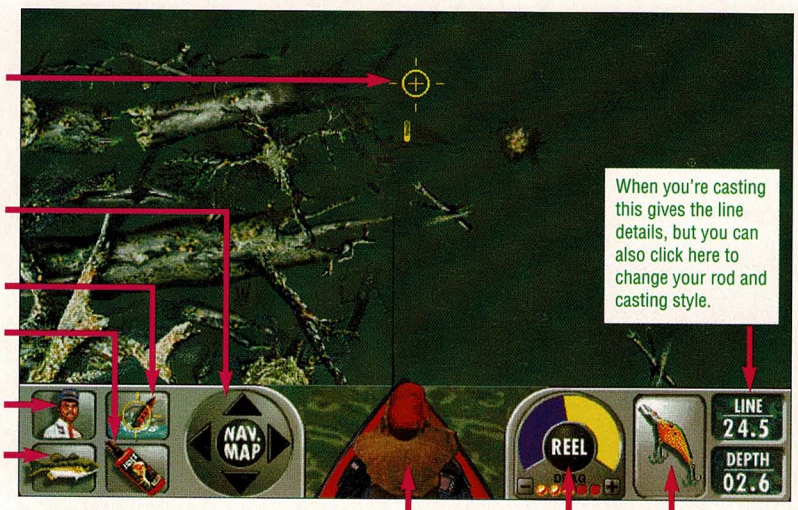
NEXT>

Before you set out, get some advice from the fishing experts. They'll tell you all you need to know about bass, tackle and spawning, among other things.



The casting target is over a bunch of bass with the lure just below it in the water. The logs and debris, curiously, don't interfere much.

Click this for the navigation map and use the triangles to manoeuvre the boat.

Locates casting target.

Fish tonic – makes 'em bite.

Fishing buddy – for advice.

Live well – survey your catches.

When you're casting this gives the line details, but you can also click here to change your rod and casting style.

Digitised fisherman. He even casts and waggles his rod.

The reel meter with adjustable drag.

Click here to change your lure.

Trophy Bass

Price: £34.99. **Out:** now.
Requires: Quadra or better, 8Mb of RAM, System 7 or later, 13-inch colour monitor, double-speed CD-ROM drive.
Contact: Sierra On-Line on 01734 303322.

Graphics 67%
Mostly slick, but the fishing bits are samey and the casting animations slow.

Sound 64%
Lots of sploshing water, not much variety of effects or nature sounds.

Gameplay 84%
You need patience, but bringing in the fish is a real (sorry) challenge.

MACFORMAT RATING 74%

D-Day America Invades

An addictive war game that demands thought rather than quick reactions. Don your thinking caps, chaps, 'cos you'll be hard pushed to beat the Nazis.

Hex-based war games have a poor reputation. The graphics are often dull, the sound appalling, and the sense of actually 'being there' reduced to a few strange looking counters and a Herculean leap of the imagination. But, somehow, they do manage to grip you. As you shuffle about the map, deploying troops and ordering air bombardments, you feel imbued with a sense of power.

D-Day America Invades is one of the most detailed tabletop simulations you'll ever see. Nothing's been left to chance – even chance is selectable as one of the in-game options – and to win you'll have to be super-human. Unless you play the bad guys...

Set in Normandy, *D-Day* gives you the choice of playing either the Allies (in this case, mainly the Americans), or the Axis powers – the Nazis. As with all games of this type, movement is allocated in turns, which means you can take as long as you like planning your next move, and then sit back and watch as your troops commit themselves to hideous deaths or glorious victories. If you're the Allies, it's probably the former; if you're the Axis bunch, then the latter is more likely.

Statistically speaking, it seems, the Germans should have won World War Two. They had more tanks, more men, better guns and supplies – the only thing they didn't have as much of was air support, but, in the longer battles, that doesn't seem to matter. So if you want to win, and you're not the best war gamer in the world, then you'd best play the enemy.

Beginner friendly?

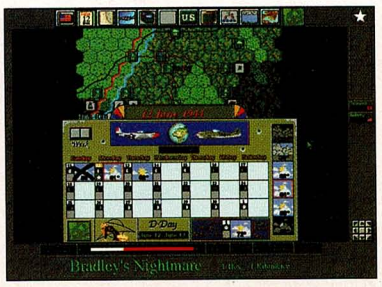
One of the biggest problems with this genre is its inaccessibility. The manual is as helpful as it can be, but the game has no tutorial mode, which leaves newcomers out in the cold. The amount of detail, too, can be daunting at first, as you desperately try to make some sense of the battle modifiers and terrain variants. Tanks, for example, can only travel along roads and, at speed, on grassy plains – try them in the woods and you'll lose to the local cub-scouts, armed only with pea-shooters and the odd conker. The six battle scenarios vary in difficulty, but, true to history, seem to favour the Axis powers. Only one – 'Operation Cobra' – has the Allies starting from anything like a strong position.

The maps are bright and colourful, and the menus, though basic, are easy on the eye with a deceptively simple appearance. The sound is well done too, with all the 'rattattatt' machine gun noises, bomb blasts and aeroplane dives leaping into life as soon as you finish your go. It's just a shame there's no 'zoom' mode for you to zero-in on your troops and get a better look.

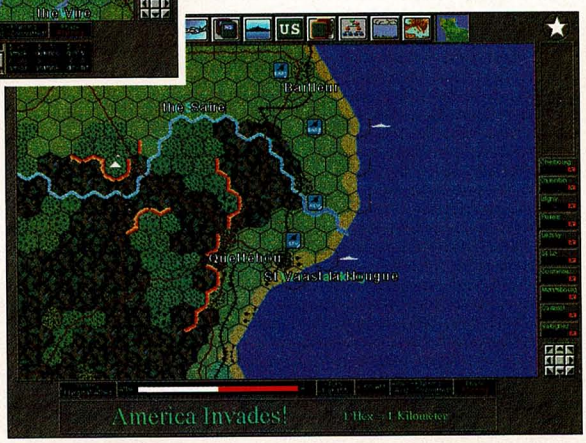
This game is addictive: from the moment you finish your first turn, you're gripped. Every mistake you make is paid for, every win a triumph worthy of champagne cocktails. The graphics may be simple, but the mechanics are impressively complex. To win would take months of dedicated playing and hours of studying the manual to take in weather modifiers, morale factors and fatigue levels – it's more than just pointing and clicking the mouse.

D-Day America Invades is a great addition to any war gamer's collection – enthralling, with tough battles and detailed mechanics. But if you're a novice to war games, then this isn't the game for you. *America Invades* is for veterans, not raw recruits. **Simon Cox**

With odds like these, you're bound to win the war. Unless, of course, you're fighting the Germans. Oh look, you are.



Planning ahead is essential. Reinforcements and supplies show up on the calendar.



All quiet on the Western Front. Until you scroll down a bit. The battle 'America Invades' is the largest, most difficult scenario.

It's hard to see, but if you look closely there is an American flag, too.

This scenario is named 'Bradley's Nightmare'. Needless to say, the odds are against you.

D-Day America Invades

Price: £46.99. **Out:** now.
Requires: colour Mac, 5Mb of RAM, System 7 or later.
Contact: US Gold on 0121 625 3388.

Graphics — 72%
Not exactly stunning, but colourful and detailed.

Sound — 50%
Great one-off effects – lots of 'Boom!'s and 'rattattatt's.

Gameplay — 80%
Gripping, but too hard to win as the Allies.

MACFORMAT RATING — 80%

The Ultimate Doom

Death, anarchy and gratuitous gore are all very well, but it can get a tad confusing. How many more versions of *Doom* are going to be released?

ALTERNATIVES

If you liked *Doom* and want something similar then check out *Marathon*, *Dark Forces* and *Descent*. *Marathon 2* is due out any second, and judging by the demo (which was on the Cover CD of MACFORMAT 32) it should be a winner.

Before we even start to review *Ultimate Doom*, we'd better explain the confused *Doom* product line. There are four versions of *Doom* in existence: shareware *Doom*, *Doom 1*, *Ultimate Doom*, and *Doom 2*.

Shareware *Doom* contains the first of the three episodes of *Doom 1*, minus some of the better weapons. It was featured on last issue's MACFORMAT Cover CD, can be purchased for a minimal price from games shops, or you can download it from the Internet at **http://www.cee.hw.ac.uk/~mapleson/doom/doom.html**

Doom 1 is what you got on the PC if you registered the shareware version – it contains all three levels and all the weapons. Id Software claim that they have no plans to release it just yet on the Mac, but rumours persist.

Ultimate Doom is all of *Doom 1* plus one extra episode consisting of nine levels, and will be sold through normal retailers in the UK instead of *Doom 1*. The RRP for *Ultimate Doom* is £29.99, and it should be in the shops by the time you read this.

Doom 2 is the sequel with 32 new levels, more baddies and an extra weapon. It has an RRP of £44.99 and is distributed by Virgin Interactive on 0171 368 2266.

Okay, now we've sorted out what *Ultimate Doom* is, should you buy it? When we reviewed *Doom 2* in issue 31 of MACFORMAT, we gave it a well-deserved Classic award. Unlike the technically superior *Descent* (reviewed on page 120), it's immense fun to play.

However, *Doom 1*, in the shape of *Ultimate Doom*, is not much different from the sequel, *Doom 2*. You lack the double-barrelled shotgun, and some of the more fearsome beasties are missing, but the essential gameplay is the same blood splattering gorefest joy. In total, *Ultimate* has 36 levels, a few more than *Doom 2*, although they seem slightly smaller, and are certainly much more naïve.

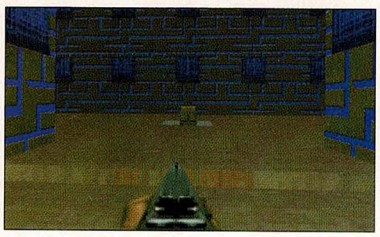
If violent action games aren't your goblet of gore, then forget *Ultimate* or *Doom 2*. If you've always wanted to find an outlet for your violent side, then buying both is rather expensive, so which should you aim for?

The thing to remember is that there are lots of WADs available free on the Internet, or on CDs such as ours. These are extra levels, created by enthusiasts, and are usually freeware. There are so many, they'll keep you busy until you bore of *Doom*. Dread the thought. Both *Doom 1* and *Doom 2* can use WADs, although with *Doom 1* you won't get the new monsters or graphic textures. On this basis, it's probably worth forking out for *Doom 2*. Not only do you get a better game, you ensure freeware fun for a long, long time.

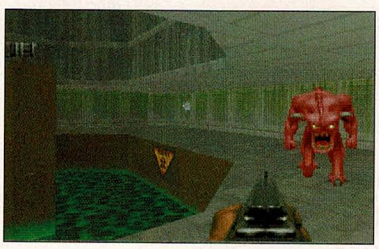
If you are on a tight budget, then *Ultimate Doom* is still an excellent deal, assuming that the lower recommended price holds in real world prices. And if you've never played *Doom 2*, you won't miss what you don't know, and you'll have the option to buy it in the future.

DEREK SMITH

The signs in the background read 'Exit', so you'd better help this member commit suicide. Eat lead!



Getting that rucksack is vital. It contains a sleeping bag, hot chocolate and a Swiss army knife.



You'll meet lots of the cannon fodder, but alas, not the big bad-attitude boys like the Spider Mastermind from *Doom 2*.

The new flat is great, the front door especially, but that carpet has got to go.

I prefer the more sophisticated levels in *Doom 2*, but there are some clever ideas to be found in the original *Doom*.

Die, you vomit sucking abomination from Hell! If that's okay with you, I mean.

I'm not impressed with your muscles, matey. You should see how my trigger finger has developed.

THE ULTIMATE DOOM

Price: £29.99. **Out:** now.
Requires: LC475 or better, System 7.1, 4.5Mb free RAM, 20Mb of hard disk space.
Contact: GT Interactive on 0171 258 3791.

MACFORMAT RATING 85%

Complete Waste of Time

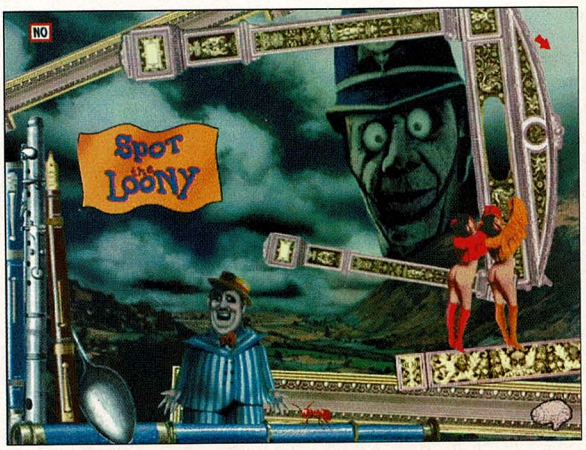
A game stuffed to the gills with Gilliam-esque animations, daft soundbites and gaming non-sequiturs. Is this really supposed to make sense?

Monty Python's Complete Waste of Time opens in a suitably theatrical manner, complete with pop-up caricatures, musical fanfares and a giant pair of talking lips. Click on a pulsating brain, and you reach the packed main menu, where an enormous array of games, activities and clips awaits you.

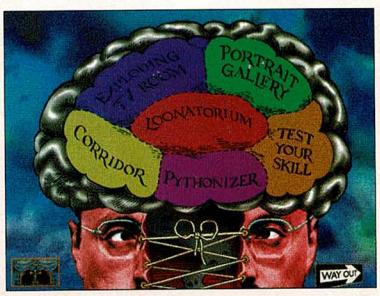
The Loonatorium is where you embark on the big game, the Secret of Intergalactic Success, but there are other things to do first. Visit the Corridor, where you play giant pinball in a cloistered hall, aiming at pop-up Morris Minors and other classic Python characters. Watch famous Python TV clips in the Portrait Gallery, where you can set up a miniature drive-in movie show and play with the pop-up characters lurking in and around the picture frames. Click on the TV's controls in the Exploding TV room for more classic moments from the series. Test Your Skill provides three arcade-style games: in the Pig Game you control a cowboy in ludicrous flares trying to shoot at flying, defecating pigs; the Gopher Game entails smacking pop-up characters with a mallet before they disappear again; and in the Chicken Game you prevent the bird-man from being impaled on a row of spikes. The final feature is the Pythoniser, a suite of software for customising your Mac, with lots of animated screen savers, Desktop backgrounds and classic Python soundbites to add to your System events – disk inserting/ejecting, alert sounds, startup and so on. Perfect for the true Python fan.

This is one big package, which is possibly why the main game, The Secret of Intergalactic Success, is such a headache to find, although a few hints are given. The main clue is that you have to 'spot the loonies'. When you've spotted enough loonies, you have to find a door. Click on the door and the Spanish Inquisition leaps out. Click on a sign, and you enter the main game. Phew.

The Secret of Intergalactic Success appears to be a trivia quiz combined with a maze. It's aimed at Python experts, so if you don't know who ate the crunchy frog, you're completely stumped. It could be the start of a huge, satisfying (and map-making) intellectual challenge for devotees, but it could also be the end of a tedious and random experience for lesser mortals.



Spot and shoot the loonies, find the Spanish Inquisition, and embark on a lifelong trivia plod.



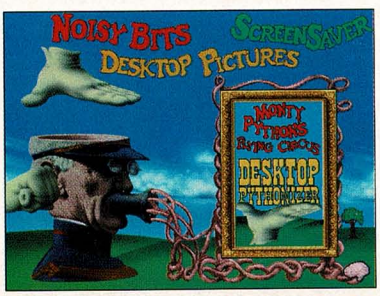
The starting point for all your *Python* adventures. Click on your chosen brain segment to relive that old *Monty Python* magic.

You could spend hours exploring *Complete Waste of Time* – it's full of zany characters and animations that appear when you click on the right things or move your mouse to the right place, and some of them are funny, first time round. The arcade games are playable for a while, but their mechanics and long-term challenge are on a par with *Space Invaders*. And of course you could waste happy hours customising your Mac with Python screen savers, Desktops, soundbites and icons. Then there's the fact that it'll probably take you hours to find and play the game.

If you absolutely adore *Monty Python*, and want to surround yourself with the genius of Terry Gilliam, you'll like this. You might even love it. But if you only thought *Python* was good in parts (sacrilege!) and you're not stuck in a 25-year-old time warp, it's more likely to be a race between boredom and frustration.

Rod Lawton

Aha – the exploding TV room. A great place to relive all those famous Python sketches... over and over again.



Can't get enough Python? Prolong the pleasure by adding Desktop backgrounds, screensavers, icons and soundbites to your Mac.

The Pig Game. Shoot the defecating pigs before they shoot you. You're armed with bullets; they're armed with their bowels.

Complete Waste of Time

Price: £39.99. **Out:** now.
Requires: Quadra or better, System 7.1 or later, 8Mb of RAM (4Mb of free RAM), 256 colours, CD-ROM drive.
Contact: 7th Level on 01621 816900.

Graphics 89%
Sometimes a little mushy, but they capture the genius of Gilliam perfectly.

Sound 91%
Lots of soundbites, well edited and good quality.

Gameplay 39%
Amusing set pieces, but gameplay that's tedious when you find it. If you can find it.

MACformat rating 65%

Tasty

It is actually possible to buy Cockroach Clusters, but not Crunchy Frogs.

Dead parrots

Since the dawn of time, there have actually been more dead parrots than live ones.

Film fact

Monty Python's Life of Brian was filmed on location in Tunisia.

Free reader ads

If you're buying, selling or swapping Mac gear, looking for contacts or user groups, then your search is over...

HARDWARE FOR SALE

■ **IIci 32/540,** DayStar Turbo 040 40MHz, 20-inch colour monitor & card (also 14-inch). EtherNet A4 laser G/S scanner, CD drive, SyQuest 44 – £2,350 or will split. ☎ 01932 873328

■ **LCIII 8/80,** 14-inch colour monitor, keyboard, mouse, one yr old, perfect condition – £800. Dave, Cambridge ☎ 01223 363686 (eve)

■ **Quadra 650 8/160,** 14-inch Trinitron monitor, keyboard, software including *Marathon, Chuck Yeager's Air Combat, RAM Doubler* – £1,100. Alex ☎ 01553 840263

■ **LC 4/40,** 13-inch Trinitron colour monitor – £275; Mac Plus, keyboard, mouse – £65. Buckinghamshire ☎ 01296 25720

■ **Mac IIfx** 32/230, 20-inch Trinitron monitor, Videovision frame grabber, Radius 24x card, 19-inch greyscale monitor – £1,950. ☎ 01296 25720

■ **Performa 400,** *ClarisWorks*, StyleWriter II, vgc – £550. ☎ 01604 752348

■ **Radius Videovision** – £900; Studio upgrade – £800; or both for £1,500; Rocket 33MHz accelerator – £220; Lemans-GT graphics card – £350; 20-inch Trinitron monitor – £675. Bucks ☎ 01296 25720

■ **Performa 630** 20/350 CD/TV, Sony Multiscan 15sf monitor, Wacom ArtPad, *Dabbler, ClarisWorks, Videoshop, KPT* – £1,150. Wilts ☎ 01225 865047

■ **Performa 6200** CD, 15-inch monitor, boxed, bought June '95 – £1,400; new, colour flatbed scanner & *Photoshop LE* – £300; LaserWriter – £300. ☎ 01225 427986

■ **QuickTake** 150 digital camera, boxed, under warranty, three mths old – £399. ☎ 01483 284409

■ **PowerBook 165,** vgc, carry case, Spanish OS but can be changed to English – £500 ono. ☎ 01483 283128

■ **14-inch Trinitron** monitor – £140 ono; Agfa Focus II, 800dpi greyscale scanner & software – £400 ono. Kingston, Surrey ☎ 0181 549 1656

■ **IIsi,** 68030 CPU, colour monitor, 5Mb of RAM, 80Mb HD, System 7.5, keyboard, mouse, *Word 5, M for Base, SimCity, Theme Park* and more – £500 ono. ☎ 01548 844142

■ **Quadra 650 12/500,** 14-inch monitor, keyboard, HP 550 (colour), boxes, 14 mths old – £1,400 ono. ☎ 0171 372 2085 or 0171 435 3607

■ **SyQuest 270Mb cartridge,** unused, mint cond – £40 ono. Samuel ☎ 0161 257 2068 (after 6pm)

■ **LCII 8/80,** keyboard, mouse, System 7.1, home use, *ClarisWorks 2* and more – £300. ☎ 01252 524762 (eve)

■ **Newton MessagePad 110,** case, flash card, manuals, three mths old – £150. ☎ 01788 535316

■ **Floppy disk drive** (external), excellent condition, must sell fast, home use only – £30. ☎ 01904 791278 (after 7pm)

■ **LC475 8/80,** 16-bit colour, 14-inch Trinitron monitor, keyboard, mouse, external CD300, *RAM Doubler*, lots more software – £800. George ☎ 0114 244 7406

■ **Mac Plus,** keyboard, 20Mb external HD, 1Mb RAM, ImageWriter – £300 ono. ☎ 0181 940 8825 (7pm to 9pm wkdays)

■ **Memory card** for Duo, 4Mb 70ns – £75. ☎ 0181 422 6204

■ **Dayna EtherPrint,** EtherNet-to-LocalTalk bridge, enables connection of Apple LocalTalk printers to EtherNet network, boxed, instructions – £265 ono. Berks ☎ 01734 547758

■ **Newton MessagePad** 120, 2Mb of RAM, Newton List Manager, full connection kit to all Macs, brand new 1995, boxed, unused – £275. Jez ☎ 01706 826381

■ **PowerBook Duo 230,** 8Mb of RAM, 80Mb HD, good cond – £525. Tim ☎ 01428 658173, e-mail **tbicknell@cix.compulink.co.uk**

■ **LCII 6/40,** accelerated 33MHz, FPU, 512K VRAM, colour monitor, keyboard, mouse, System 7, manuals, exc cond – £550. ☎ 01779 812873

■ **LC 4/40,** 12-inch screen, keyboard, mouse, *ClarisWorks 2.01, At Ease*, all boxed, excellent condition – £250. ☎ 01934 712934

■ **LC475 8/160,** 14-inch Trinitron monitor, CD300+ external, extended keyboard, mouse, boxes, manuals, System 7.1, exc cond – £1,000. Simon ☎ 01792 403686

■ **Apple QuickTake 100** digital camera, new, boxed, unregistered – £150; *Working Watermarker, Square One, & Calc Plus* – £10 each; *Poser* – £50. ☎ 01484 510753

■ **Scanman 32** B&W hand-held scanner, driver software, original manuals – £110. ☎ 01633 601613

■ **PowerBook 520** 4/160 Mb, battery, AC adaptor, *User's Guide*, hardly used – £1,000 ono. ☎ 0181 892 4126

■ **PowerBook 165** 8/80, excellent condition, carry case, System disks – £825 ono. Peter, Manchester ☎ 0161 275 4640 (day), 0161 442 3031 (eve)

■ **Apple Colour OneScanner,** cables – £350 ono. ☎ 01904 431296

■ **LC630 8/350 CD,** boxed, immaculate, *Photoshop, ClarisWorks*, extras – £550 ono. Mike ☎ 01703 731795

■ **Performa 10/40,** 14-inch colour monitor, keyboard & mouse, boxed with manuals, System 7.1, *ClarisWorks, PC Exchange, At Ease* – £500. ☎ 0181 567 3779

■ **Video Spigot,** Power AV, unused, boxed, sealed, unregistered – £799 ono. Jason ☎ 0171 581 4174

■ **Colour Classic 4/120,** Personal LaserWriter 300, ext CD-ROM drive, speakers, System 7.5, boxes and manuals, exc cond, home use – £1,300 ono. ☎ 01203 352150

■ **LCIII 4/80,** 25MHz FPU, System 7.1.1, mouse, keyboard, double-speed CD drive, ImageWriter II, mint cond – £700 ono. Sarah, Sheffield ☎ 0114 288 5667 (after 7pm)

■ **IIsi CPU 5/80,** FPU, *RAM Doubler*, System 7.5, home use – £550; 14-inch Apple colour monitor, 1yr old – £150; reliable StyleWriter – £90; extras. ☎ 01223 510761 or 01223 334518, e-mail **kk205@cam.ac.uk**

■ **Performa 630 CD,** TV, video, 20Mb RAM, 350Mb HD, 15-inch Multiscan monitor, keyboard, mouse, StyleWriter, printer, nine mths old – £1,500. ☎ 01392 52809

■ **Performa 400** (LC II), 512K VRAM, 4/40, some bad sectors on internal drive, price inc external 80Mb drive, keyboard, mouse, System 7.1 – £275. ☎ 01772 769875/0973 709899

■ **Kurta 15/ADB** 12-inch x 12-inch tablet, cordless pen, puck, manual, software – £195; Duo SIMM 4Mb – £75; Duo floppy/ADB adaptor, boxed – £45. ☎ 01923 822580

■ **Zoom 28.8 fax-modem,** as new, BABT approved – £145 inc P&P. Julian ☎ 01952 727228 (eve)

■ **LCII 6/40,** System 7.1, 14-inch Trinitron colour display, keyboard, mouse, manuals, *ClarisWorks*, boxed, as new – £600 ono. Shrewsbury ☎ 01743 242039

■ **LCII 4/80,** System 7, 14-inch colour monitor, mouse, keyboard, B&W HP DeskWriter, spare cartridge, manuals, exc cond, selling to upgrade – £800 ono. Aylesbury ☎ 01296 641040

■ **PowerBook Duo** 280c EM 12/250 AM, top duo, most software, three batteries, charger, DD and FAO – £1,500 ono, may part exchange. ☎ 01722 332792

■ **Performa 460** 8/160, 14-inch monitor, CD-ROM drive, keyboard, mouse, *ClarisWorks 2.1*, games inc *Rebel Assault*, nine mths old, as new – £750. ☎ 01349 884452

■ **Performa Plus** 475 4/160, 14-inch monitor, keyboard, mouse, original software, manuals, StyleWriter II printer & trolley, five mths old, hardly used. Ayrshire ☎ 01505 683474

■ **Performa 200** 4/40, box, manuals etc, original software, home use –

USER GROUPS

Need hands-on help with a Mac problem? Want to swap shareware or freeware, or just meet other Mac enthusiasts? Try a user group near you.

■ MACBEL User Group VZW – Belgium's only non-profit Mac User Group. Bimonthly magazines, Internet discounts, local BBS support (Telefinders 32-3-4543069) and meetings. Contact Bart, Belgium ☎ 00 32 3 6404031 or e-mail **info@macbel.be** (MF34)

■ Mac Jungle BBS – Telefinder host – 28.8K V.34 modems – over 1Gb of Mac shareware on-line! Supports TLAN conferences daily. ☎ 01235 520507 (MF34)

■ Midapple, the Mac users' group in the West Midlands. Monthly meetings and a newsletter. Send SAE for information to Midapple, 24 High Street, Wall Heath, Kingswinford, West Midlands, DY6 0HB. (MF36)

■ Brighton Hanover Computer Club for Mac, IBM and Amiga users. Meet fourth Tuesday in every month at the Hanover Centre, 33 Southover Street, 8pm. Contact Colin ☎ 01273 602834. (MF36)

■ The Mac Factory BBS. Specialises in Mac shareware. ☎ 01977 708911 (24hrs). SysOp Mark Evans. (MF37)

■ Massacre Bulletin Board now on-line. Modem speeds up to 14,400 24 hrs. ☎ 0131 447 9199 (MF37)

■ Red Apple Software, the Distribution Group! Non-profit making shareware authors, an established network for old & new programmers. Write to: RAS, Lane End, Oak Tree Lane, Tavistock, Devon PL19 9DA or log on to AppleEye BBS on 01234 822180. Red Apple/PentriSoft in the Computing conferences folder. (MF37)

■ The SE Essex Mac User Group meets in Southend, second Monday of the month at 8pm. Mike Foy ☎ 01702 468062 or e-mail **mac@mikefoy.demon.co.uk** (MF38)

■ A new first class BBS, Xnet UK ☎ 01992 550733. A local number to all London numbers, devoted to all subjects for problems. (MF38)

■ Media Club – the best Portuguese Mac user group. Free on-line help via Telnet International. Please send SAE to Media Apartado 15006-1073, Lisboa, Codex, Portugal. (MF39)

■ Australia Queensland Toowoomra Mac user group. 202 Darling Street, Drayton, Toowoomra, Queensland, Australia 4350 or ☎ 61 076 333383 or fax 61 076 333383 (MF39)

■ Appel Club Eindhoven (ACE), 80 members, informal setup, ten meetings a year, fee Dfl 25/yr. Contact Arie Nagel, Puthof 5, 5655 AM Eindhoven, Netherlands ☎ 040 2523879 or e-mail **a.p.nagel@tm.tue.nl** (MF40)

■ New Mac user group, Helensburgh, Strathclyde. Peter Stevens ☎ 01436 676621 (MF40)

Groups are listed here for six issues, then deleted in order to help weed out defunct groups. The code at the end of each entry is the last issue in which it will appear. If you want your entry renewed, send in the coupon on page 130. If your group isn't listed here, then send us your details!

Please note: this list is provided as a free service for amateur, non-profit-making Mac user groups. MACFORMAT does not endorse or recommend any group and cannot be held responsible for any problems you might suffer as a result of contacting any of the groups advertised here.

UK USER GROUPS

The User Group Council provides a list of all the user groups registered with them. If you wish to contact the Council, ask for John Knight ☎ 0181 314 5555.

Local user groups:

- Aston University Mac UG, Birmingham area, contact Ray Tier ☎ 0121 359 3611
- Berkshire Mac UG, Ian Burn ☎ 01734 813669
- Blackburn Mac UG, Roger Moreton ☎ 01254 670043
- Bournemouth Mac UG, Barry Cheesman ☎ 01202 615859
- Bristol (BAUD), Malcolm Ingsley ☎ 01454 616846
- Cambridge Apple UG, Ian Archibald ☎ 01223 311157
- Cancer Research/RMH UG, Raymond Henry ☎ 0181 643 8901 ext 4636
- Edinburgh Apple UG, John Beatie ☎ 0131 554 5096
- Gateway UG, Norfolk area, Verne Anderson ☎ 01638 513000
- Glasgow Mac UG, Stephen Broadfoot ☎ 0141 339 6646
- Hampton Court UG, Sabre Gilmartin ☎ 0181 979 0262
- Herts/Beds Apple UG, Norah Arnold ☎ 01582 573918
- Highland Mac UG (HIMUG), Scottish Highlands, Bob Warner ☎ 01463 715322
- Liverpool Apple UG, Irene Flaxman ☎ 0151 928 4142 or 0151 949 0307
- London Mac UG, John McKnight ☎ 0181 314 5555
- Mac Assist, Cardiff and district, Nigel Arrighi ☎ 01222 224682
- Midapple, West Midlands, William Watson ☎ 01384 277921
- Midland Mac UG, Worcestershire, Ivan Knezovich ☎ 01299 402631
- North West Apple C C, George Evans ☎ 01270 583714
- Nottingham Mac UG, David Nicholson-Cole ☎ 0115 945 5077 or 0115 945 5444
- Poole Mac UG, Bob Lister ☎ 01202 684441
- S E Essex Mac UG, Michael Foy ☎ 01702 468062
- Southampton Mac UG, Clive Marklow ☎ 01703 293453
- Southern Mac UG, Salisbury area, Roger Ford ☎ 01722 780102
- Southwest Mac UG, John Elver ☎ 01272 693119
- Staffordshire Poly Mac UG, Mark Stiles ☎ 01785 52331
- Sussex UG, Hastings & E Sussex, Garry Nevin ☎ 01424 714110
- West Midlands UG, Danny Torbica ☎ 01902 336172
- Yorks & Humberside Mac UG, David Vardy ☎ 01423 358853

Thematic User Groups:

- BAPC (Printers), Derek House ☎ 01228 513621
- Christian Mac UG, Paul Wareing ☎ 01789 490153
- Corel Draw UG, Jill Foster ☎ 01509 415101 or 01509 620442
- Developers UG, John French ☎ 01895 672654
- HebreWare, Mendy Scharf ☎ 0181 802 6143
- Helix UG, John Sandell ☎ 01763 273379
- Independent School UG, Ian Carter ☎ 01252 512151
- LAW Mac UG, Charles Christian ☎ 01379 88518
- Lisa Users Group UK, Sheila Bell ☎ 01367 710453
- MacBaud ☎ 01685 58027
- MacLaw, Nicholas McFarlane-Watt ☎ 01865 784777
- Medical UG, Keith Davey ☎ 01836 348284
- Microsoft UG, ☎ 01252 834995 – ask for Enquiries
- Multimedia UG, Richard Hurley ☎ 01273 834588
- PageMaker UG, David Foster ☎ 01509 415101
- QUAD Club (QuarkXPress), Philip Caplan ☎ 0181 523 4233
- School Mac, Gloucestershire, Bill Henley ☎ 01453 825422
- School Mac UG, Cambridge, Derek Smith ☎ 01945 584146
- Scottish HyperCard UG, Tim Anderson ☎ 01698 740535
- Special Needs UG (SNUG), Geoff Hughes ☎ 01744 24608
- Strata UG, Roger Harris ☎ 01227 369689
- The British IIGS UG, Peter Stark ☎ 01223 838231
- Young Mac ☎ 01795 535472

£300 ono. ☎ 0117 970 1812 (eve)

■ **LCII 4/80,** CPU only with maths co-processor, boxed, good cond – £300 ono. ☎ 01727 854897

■ **IIsi 9/80,** 14-inch colour monitor, keyboard, mouse, System 7.5, professional software, many utilities, exc cond – £650. ☎ 0161 654 4124

■ **PowerBook Duo** 210 4/80, StyleWriter II printer, *Claris 3 Bible, Quranic* – £700. Rober ☎ 01224 632862

■ **System 7.1,** boxed, manuals, orig disks – £20; five games, all boxed, orig disks & manuals; books on Mac. ☎ 0181 548 0403

■ **LocalTalk card** for ImageWriter II or LQ printers for networking your printers – £50 or Apple keyboard & mouse in exchange. ☎ 0181 552 0250

■ **PowerBook 100** 4/40, ext floppy drive, power supply, battery, many extras, immac – £325. ☎ 0181 552 0250

■ **Performa 450** 4/120, 14-inch high res monitor, software, vgc – £525. Bristol ☎ 01275 844956

■ **Centris 610** 16/250, 1Mb VRAM, CD300e, keyboard, mouse, manuals – £850; 16-inch Trinitron monitor – £450 ono, extras offered. Wilmslow ☎ 01625 530030

■ **Four 1Mb 30-pin SIMMs** from Quadra 700 – £25 ea or £90 the lot. Julian ☎ 01273 684730

■ **Apple CD300 Plus,** as new, all cables etc – £120 ono. ☎ 01295 255902

■ **US Robotics Mac'n'fax** 28,800, six wks use only – £175. Garrick ☎ 01403 323352 (work) or 01483 851052 (home), e-mail **garrick@garrick1.demon.co.uk**

■ **IIci 20/80,** CPU, 24-bit colour, 44Mb SyQuest drive – £650; heavy duty monitor arm (to 70lbs) – £100. ☎ 0171 586 4523

■ **Apple HDs** 350Mb, 250Mb, 80Mb (PowerBook), 4Mb 140/170, 4Mb IIfx SIMM, DRAM kit, Duo battery – phone for cheap prices. Nick ☎ 01494 714302 (eve)

■ **Quantum 80Mb hard drive,** two yrs old, formatted with *MS Works 3* installed, upgrade older Mac for £45. ☎ 01705 690842

■ **Quad-speed CD drive** & *Grolier Encyclopedia* – £250. ☎ 01392 74422

■ **PowerBook Duo 230,** faulty motherboard – £170; PowerBook 170 broken screen – £150; wanted: manual for Apple LaserWriter IIntx & video editing software for Mac. ☎ 01480 300409

■ **LC475,** 8Mb of RAM, 80Mb HD, processor upgraded to full 68040 (inc built-in FPU), 14-inch monitor, keyboard, full working order – £595 ono. ☎ 0973 263519 or e-mail **kaos@dircon.co.uk**

■ **PowerPort Mercury** internal fax-modem for 100 series PowerBook, 19.2 modem, 14.4 fax – best offer. Gary ☎ 01226 205220

■ **16Mb DIMM** – £350; 256F Cache DIMM – £80. Both sealed, as new, with receipts. ☎ 0191 261 2683 (day)

■ **Performa 630** 8/250 CD, 14-inch monitor, keyboard, *ClarisWorks* & other software – £1,200. Thes ☎ 01305 889223

■ **LC475 8/160,** 14-inch colour monitor, keyboard, mouse, ext CD-ROM drive, all boxed, manuals – £1,100. Eric Roberts ☎ 01766 770401 or 0374 604460 (after 5pm)

■ **StyleWriter inkjet** printer, exc cond, light home use – £100. Terry ☎ 0113 252 5038 (eve)

■ **LC475 8/80,** 33MHz, monitor, external 160Mb HD, CD300, keyboard, mouse – offers. Birmingham ☎ 0121 454 1867 (eve)

■ **PowerBook 170** 8/80, power supply, batter, extras, immac – £700. ☎ 0181 552 0250

■ **LC630 8/250,** Apple 14-inch monitor, double-speed CD-ROM drive, keyboard, System 7.5.1, lots of software, *At Ease, ClarisWorks,* eight mths old. Mario ☎ 01843 292276

■ **Audiovison** 14-inch Trinitron monitor, built-in speakers/microphone – £300; *Avid Videoshop 3.0* CD – £50; 14Mb DIMM – £350. All perfect, unopened. ☎ 0191 261 2683

■ **LCIII,** 20Mb of RAM, 160Mb HD, VRAM, Apple monitor, all extras, StyleWriter II, loads of software, home use only – offers. ☎ 0161 881 1001

■ **Kensington Turbo mouse,** brand new, unregistered – £40. W London ☎ 0181 997 7966

■ **IIsi 5/40,** 13-inch colour Apple monitor, extended keyboard, mouse, System 7, brand new, sofware – £800. ☎ 0171 286 5951 (eve)

■ **160Mb ext HD,** cables – £100. Peter, York ☎ 01203 714997

■ **SCSI-2 HDs,** Seagate 245Mb, brand new – £100 + P&P, both brand new. Asif ☎ 0161 273 5704

■ **HP DeskJet** 12,000/PS, 8Mb of RAM, PostScript printer, only 583 pages printed, spare yellow & black cartridges – £800. Julian Roberts, Clywd ☎ 01492 534575 (day)

■ **Classic II** 10/40 – £525; ImageWriter II – £130; OCR Scanman 32 & SCSI adaptor – £125. Cables, manuals inc. Lincoln ☎ 01522 522836

■ **Performa 475** 8/250, three mths old, still under warranty, vgc, LaserWriter, lots of software – £850. Ian ☎ 01268 490560

■ **LCII,** 10/270 with Formac accelerator, 14-inch Trinitron monitor, Apple double-speed CD, Global Village Gold II modem, all as new, light home use – £700. ☎ 01253 855947

■ **Canon CLC10** colour copier/scanner/printer with Mac & PC IPU interface, new cartridges, hardly used, RRP £5,500 – sell £2,200 ono. ☎ 01442 259815

■ **PowerMac 8100/100,** 16Mb of RAM, 700Mb HD, quad-speed CD-ROM drive, Apple extended keyboard, mint cond – £2,450 ono. Kim ☎ 01254 704900

■ **Supermatch 20-inch monitor** Trinitron tube – £795; RasterOps 8/24 xli video NuBus accelerated card – £695. SW London ☎ 0181 941 0409, e-mail **alan@hecate.demon.co.uk**

■ **PowerMac 7100/66** 8/1Gb AV, no CD, Micropolis fast drive, 11 mths old, hardly used – £1,350 ono. ☎ 01256 23054

■ **Newton MessagePad 100,** exc cond, hardly used, leather carry case (worth £40), *Columbo's Mystery Capers.* ☎ 01904 632833

■ **IIsi,** Colour StyleWriter Pro, boxed – £700 ono or swap for LC630 or similar. Dom, Midlands ☎ 01902 310056

■ **Apple LocalTalk card** for networking ImageWriter II or LQ printers, cost £150 – sell £40; ImageWriter II, all cables, manual, exc cond – £130; 1Mb SIMMs – £18 ea or all eight for £140; 250Mb Quantum Internal Drive – £90; graphic card RasterOps, 1,000s of colours – £50. Diane ☎ 0181 514 5150

■ **PowerMac 7100/66,** CD, AV, boxed, as new – £1,500 ono. ☎ 0151 648 1759 (eve)

■ **PowerBook 180** 10/120, Apple 14-inch monitor, Apple keyboard, StyleWriter II, US Robotics Mac'n'fax Sportster, all cables included, installed software, MS *Office, Now Contact, Disk Fit Pro,* the complete mobile office – £1,800 ono. ☎ 0181 261 3220 or 01256 760109

■ **LC475 8/80** Performa Plus 14-inch monitor, double-speed CD-ROM drive, StyleWriter II, 18 mths old, home use – £950. Pete, N Wales ☎ 01248 811565

■ **LCII 5/160,** 14-inch colour Apple monitor, keyboard, mouse, manuals, disks, original packing, System 7.1, excellent condition – £550 ono. Staffs ☎ 01283 512154

■ **Global Village Teleport Bronze** ext modem, brand new, sealed, came with Performa bundle – £40 or swap for CD-ROMs, Al, Los Angeles ☎ 001 310 572 9480

■ **Caere Typist Plus Graphics** hand scanner, OCR, graphics, vgc, boxed – £85. ☎ 01684 568243

■ **Quadra 840 AV** 16/1000/CD with GeoPort fax-modem, very light use, excellent condition – £2,100. ☎ 0973 660119

■ **Performa 460,** 14-inch monitor, keyboard, mouse, quad-speed CD-ROM drive, System 7.5.1, warranty, lots of software and CD-ROMs, all manuals – £850 ono. Rishi ☎ 0181 646 4082

■ **LCII base,** 12Mb of RAM, 80Mb HD, System disk – £450 or swap for 16Mb of RAM (PowerMac 72-pin). ☎ 0171 607 5390

■ **PowerBook Duo 280,** external 1.4Mb floppy, broken screen – any offer accepted; Apple 14-inch colour monitor – £125 ono. ☎ 0378 355113

■ **IIfx 8/30,** 400dpi high-res scanner, double-speed CD-ROM, Radius 21-inch colour monitor, Radius Direct colour graphics card – £1,700 ono. ☎ 01642 700820

■ **Taxan** 21-inch greyscale monitor with card for Mac II series. ☎ 01684 576423 (day)

■ **GVC fax-modem** 14,400bps with cables, four mths old – £110. B Shah ☎ 0181 954 6168 (after 5pm)

■ **SuperMac Spigot** Power AV JPEG compression card, software version 1

for QuickTime 1.6.2 and version 1.1 for QuickTime 2 – £650. Peter, Hastings ☎ 01424 429686 (after 5.30pm)

■ **Quadra 650 8/160** CPU, 14-inch Trinitron monitor, CD300e CD-ROM drive, System 7.5.1, light use, loads of software, mint cond – £1,000. Tim ☎ 01689 896893

■ **Performa 400 4/40,** 14-inch monitor, *ClarisWorks*, boxed, manuals – £450 ono. ☎ 01908 263132

■ **Classic 2/40,** StyleWriter printer, manuals, complete system, excellent condition, home use only – £400 ono. ☎ 01420 88434

■ **LCII 4/80,** 14-inch colour monitor, keyboard, mouse, lots of software, manuals, games and extras – £400 ono. ☎ 0141 339 9467

■ **IIvi 5/80,** CD drive, System 7.1, no monitor or keyboard – £330. Mark, Norwich ☎ 01603 766601

■ **Scanman 2.1,** hand-held scanner, original packing, disks & manuals – £95; *TextBridge OCR* package, works well with the Scanman, original packaging, disks and manuals – £55 or £135 for both. Mike, Suffolk ☎ 01502 518638

■ **Performa 475 4/160,** *ClarisWorks*, CPU – £450; 72-pin SIMMs 4Mb – £70; FPU upgrade full 68040 processor chip for Performa – £160. Terry ☎ 01277 201647

SOFTWARE FOR SALE

■ ***Publish It! Easy*** – £35; *MS Works 3* – £30. Peter ☎ 0181 539 8199 (eve) 01923 770127 (day)

■ ***F/A-18 Hornet,*** unregistered – £20; *Syndicate* – £15; *SimCity/Lemmings* bundle – £15; *Populous, Prince of Persia, PGA Golf 1* – £10 ea. Peter ☎ 0181 539 8199 (eve) 01923 770127 (day)

■ ***PC Exchange,*** *Mavis Beacon Teaches Typing, Power Print 1.0.3,* all boxed, manuals – offers. Paul ☎ 0181 989 2676 or 989 5087.

■ ***FreeHand 5,*** unused, boxed, manuals, unregistered – £250. ☎ 01329 284854 (after 7pm)

■ ***QuarkXPress,*** *Macromedia Director, PageMaker, PageMaker Studio, Word 5, At Ease, MacPaint, Video Director, Publish It! Easy, More After Dark,* all new, packed and unregistered – can either sell or swap, phone with offers. ☎ 0161 881 1001

■ *War Planes* – £20; *ClarisWorks 2* & manual – £18; *CD-ROM ToolKit* – £12. All on CD, plus more. Southend ☎ 01702 294330

■ *Earth Command,* still in plastic, must sell, brand new, £40 new – sell £20 ono. Jim ☎ 0181 348 0830 (eve)

■ *Syndicate* – £15; *Freddy Pharkas Frontier Pharmacist* – £10; *Star Trek 25th Anniversary* – £15; *Monkey Island 2* – £15, all originals. ☎ 01274 495380

■ ***ClarisWorks 2.1*** – £45; *KeyCAD* – £35; *Home Publisher & Type Twister* – £25; *MacGlobe* – £15; *Kodak Access* & CD – £15; boxed, manuals, P&P inc. Bob ☎ 01932 787451

■ *ClarisWorks 2,* CD, no manual, unwanted prize – £15. Simon ☎ 01733 573813

■ ***SimCity 2000*** – £15; *Myst* CD, *Return to Zork, Gabriel Knight, Kings Quest, Monkey Island* and more – £15.20 ea, boxed, as new. ☎ 01309 690692

■ ***QuarkXPress 3.3*** on CD-ROM, for PowerPC – offers; *Photoshop 2.5 LE,* unregistered, bundled with scanner – offers. ☎ 01709 898118 (eve)

■ ***Virtus Walkthrough Pro*** (3D visualisation software), boxed, manuals, orig disks – £165. ☎ 01684 568243

■ ***Photoshop,*** unregistered, original software, cost £400 – sell £50. ☎ 0181 960 9896

■ ***Adobe Audition,*** digital image editing, still boxed, cost £90 – sell £40. ☎ 0181 960 9896

■ **System 7,** still boxed & sealed – £50. ☎ 0181 960 9896

■ ***Quay 2*** on CD, *Illustrator, QuarkXPress, Photoshop,* I have a couple of spare copies of each – £50. ☎ 01684 576423 (day)

■ ***Effects Specialist*** font styling program, create stunning headlines quickly & easily, original packaging, manuals & disks – £55; *Freedom of Press* PostScript language interpreter (use this to print *Effects Specialist* headlines on your non-PostScript printer), original packaging etc – £55, or both packages for £85. Mike, Suffolk ☎ 01502 518638

■ ***Easy Music Starter Kit,*** complete package contains *MIDI Translator 2, MusicShop* sequencing software & *Band in a Box* auto-accompaniment program, all original – £120; *Yamaha TG33* tone generator synthesiser, hundreds of voices available, user manuals – £185 or both packages for £250. Mike, Suffolk ☎ 01502 518638

■ ***Benjamin Bunny,*** *Around the World in 80 Days, Eagle Eye Mysteries in London,* all are on CD-ROM – offers or exchange for non-children's software. ☎ 01705 649515

WANTED

■ ***TextBridge*** *PopupFolder, RAM Doubler, Omni Page* wanted – must be good price or swap from a choice too big to mention. ☎ 0161 881 1001

■ **Arabic,** Islamic & other oriental clip art. Omar Henriksson, Gastgivarec 20, 5-59199 Motala, Sweden

■ ***Castles,*** the original game. I can't find it anywhere, will pay up to £27. Jim ☎ 0181 348 0830 (eve)

■ **User manual** for LC, model BCGM 0350. ☎ 0171 402 4772

■ **Accelerator** colour card for Mac SE1, any Mac printer & leads wanted; I have Amiga CDTV & Atari SL804 laser printer – £110 ea. Mike ☎ 01480 475036

■ ***Civilization*** by Sid Meier seems to have been deleted from stock, does anyone have a copy? Fraser ☎ 01750 23312 (afternoons)

■ ***PlainTalk*** software & GeoPort adaptor for Quadra 660AV; also blank 44Mb Syquest or Nomai 5.25-inch cartridges. Darren ☎ 0181 998 8665

■ **PostScript emulation** software for HP DeskWriter 500 series (HP520/540). ☎ 0181 402 9937

■ **MACFORMAT** CD issue 26, July '95. Roy ☎ 01367 350538 (after 7pm)

SWAP SHOP

■ **Abaton** ext modem for sale or swap for System 7.5, *RAM Doubler* or *PopupFolder* etc – offers please. ☎ 0161 881 1001

■ ***QuarkXPress*** or *Macromedia Director,* both new, unopened – swap for good laser printer. ☎ 0161 881 1001

■ Anyone who wants to swap **games,** serious **software,** and even **hardware.** Manchester ☎ 0161 881 1001

■ **Swap Tamiya Fwd** competition spec r/c car for SE30 or better worth £500 or sell for £350. ☎ 0181 907 3000, e-mail **em3025@amw.ac.uk**

■ **Swap *Photoshop 3*** for *QuarkXPress* 3.331. ☎ 0121 554 6947

■ **Unused *Theme Park*** for your *Redshift* or any other astronomy package. Giles ☎ 0181 542 7851 (eve)

■ **Swap Fender Stratocaster** Marshall JCM 800 Amp Roland GSG Ibanez DD Roland Space Echo fender Rhodes Stage 73 for 7100/66 or 840AV. Ian ☎ 01539 723631

BOOKS AND MAGAZINES

■ ***Dita*** – the Madonna fanzine. Interested? Send SAE to Lisa Walters, 109 Dock road, Grays, Essex RM17 6EY

■ **Spectrum books:** *Complete Basic Programming; Spectrum Graphics & Sound;* original Sinclair manuals, *Spectrum Basic & Spectrum Introduction.* Swap for Mac stuff. ☎ 01704 550221

■ ***Classroom*** *in a Book* series for Mac software, inc *Photoshop, Illustrator, Premiere, QuarkXPress,* with CDs – £18 ea. B Shah ☎ 0181 954 6768 (after 7pm)

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New beginnings

In MACFORMAT 32 we asked if the newest Macs are a change for the better. Apple UK's PowerMac Product Manager Steve Everhard explains Apple's thinking...

Thanks for the coverage of the new Macs. Let me address your concerns about the positioning of the products.

First, PCI. PCI represents a sea change for Apple in adopting industry standard interfaces at the same time as the PC world. In the past we led with SCSI and stood alone with NuBus. We could have developed a hybrid solution which included both bus types, but testing proved that there were unacceptable performance compromises, and we were concerned that a less-than-wholehearted move to PCI would delay availability of new kinds of PCI cards from developers.

The move to DIMM memory was also not done lightly. The need for matched SIMMs was a real problem for customers with the 72-pin SIMMs. Again we've moved to an industry standard memory interface that gives customers many more options of RAM configuration and flexibility in supply. To use existing SIMMs, try SimmTree from Newer Technologies, distributed by Principal. As the SIMMs are matched, you probably won't see any performance change using this device.

Making an omelette of it?

So, why new memory, VRAM, and slots? The first generation of Power Macintosh was 100% about compatibility: we made architectural compromises to ensure we met our goals. The objective this time was to lay the architectural foundation for future PowerMacs that liberated the performance of the PowerPC processor technology. It was inevitable that we would break some things.

So what gives with the 604? Your assertion that you need specially compiled software is incorrect. I've been using *Photoshop 3.0.3* and *3.0.1* for over six months with a 9500 with no problems at all. Version 3.0.4 was compiled for the 604 and there *is* a speed improvement, but you don't *need* it to use *Photoshop* or *FreeHand. Speed Doubler* is different: it is such a low level piece of code, it falls foul of the system architecture rather than the processor – but the 604 doesn't help either.

On the 7500: you ask what extra you get for your £400. How about an extra 1Mb of VRAM, more DIMM slots giving flexibility in DIMM selection as well as more overall memory, even faster 128-bit memory access with matched DIMM modules, upgradeable processor, amazing AV capabilities for 25fps PAL at half frame sizes, a free copy of *VideoShop* and *QuickTime Conferencing*. Convinced?

So why did we spend money integrating the AV stuff if it isn't 'good enough'? I know of over 200 CD-ROM titles that have already been created using the built-in AV of the 7500 and 8500. These developers obviously disagree with you – not everyone needs full frame sizes at full rate, or can pay the extra £1,000-plus needed for a 'proper AV card'! Also, with a suitable camera you can exploit *QuickTime Conferencing* out of the box – a significant issue for networked systems. *ClarisWorks* isn't that relevant for an even larger number of potential 7500 buyers who already have a significant investment in other applications.

We expect a very large proportion of 8500 buyers to be involved in multimedia projects. In that environment composite video output is a major win. Handling video streams entirely in YUV or component 4:2:2 video also has advantages when the DAV socket in the 8500 is exploited. In many situations, the 8500 makes a tremendously capable creative workhorse. AV may not be that relevant to home users (though it is the most talked about feature of the Performa 5200/6200), but AV capabilities really do give the PowerMac the price/performance lead for multimedia development.

It's moving the game forward through integration of technologies, rather than bundling productivity applications, that sets the PowerMac family apart. With the 8500 you also get an extra 1Gb of disk space, as well as the 604 processor at 120MHz.

The 9500 is designed as a production environment, which is why it is the most expandable PowerMac to date and almost all features are stripped out, so the customer can select only the right performance components. To use up the PCI slots, try adding two monitors, a fast SCSI RAID card, a YUV video capture card and an MPEG encoder. The one spare could be used for a 100Mb EtherNet interface or a QuickDraw 3D accelerator card, etc.

I hope this helps you better understand the positioning of these products and our rationale behind their design.

MACFORMAT's Derek Smith replies: *We didn't criticise the principle behind the move to DIMMs and PCI, but readers do lament the obsolescence of their Macs. It is significant that compatibility was not Apple's main priority this time around, after the trouble you took to make the original transition to PowerPC so smooth.*

FreeHand 5.0 *will open on a 604 Mac but the Xtras do not load – a significant problem. Earlier versions of* Photoshop *won't run at full speed – what's the point of a 604 chip if processor intensive software can't take full advantage of it? Adobe seem to agree, and have since produced version 3.0.5, designed to work better with the 604.*

Yes, the 7500 is worth an extra £400, if you want the AV options. If not, VideoShop *isn't very useful. We didn't say the 8500's AV quality isn't good enough for any applications, only that if you're about to spend several thousand quid you 'would be wise to check first whether the output quality is good enough for your needs'. We buy large numbers of PCI Macs at Future Publishing, and we're very happy with their performance, but we don't use the AV features. We found that the results, while fine for* screen-based *output (say around 72dpi), were not good enough for the high quality we need.*

It does seem odd to say that including these features with the 8500 is good because it 'moves the game forwards', but then say that the 9500 is good because it is stripped. I'd be interested to see solid figures of how many 8500 owners use Video Out.

Finally, I notice you don't even mention Open Transport – could it be that it is just too buggy to defend? **MF**

SIMMTREE

For details of the Newer Technologies SimmTree SIMM adaptor, contact Principal Distribution on 01706 832000.

OPEN SPACE

Unless indicated, the opinions expressed on this page are those of the authors, not necessarily those of MACFORMAT or Future Publishing Ltd. If you have something to say, write to 'Talking Point', MACFORMAT, 30 Monmouth Street, Bath BA1 2BW. ASCII text on disk would be nice, but isn't essential. We reserve the right to sub-edit your grammar but won't alter the sense of any opinions.

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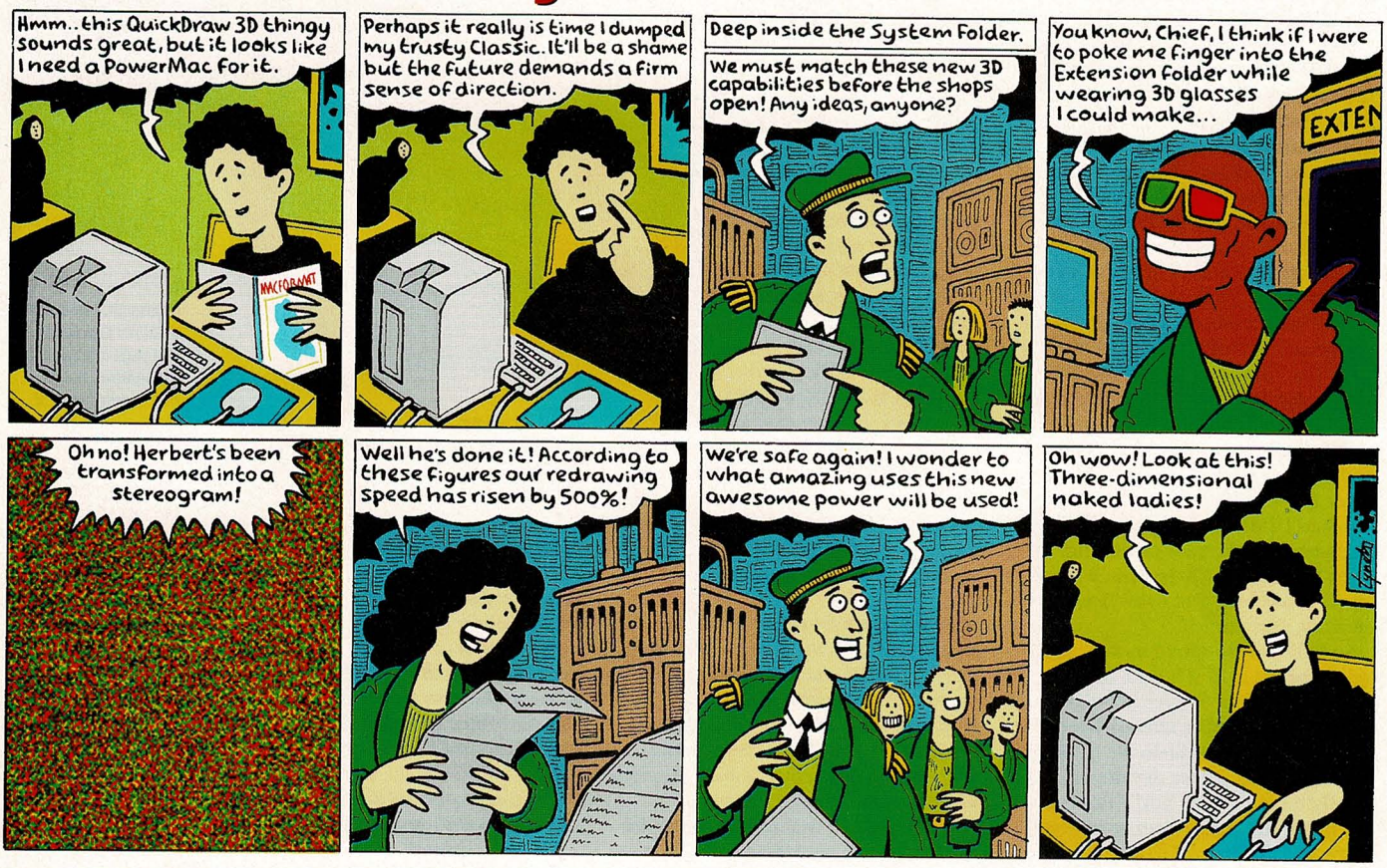
The Classic System Crew

By Bob Lynch


Hmm.. this QuickDraw 3D thingy sounds great, but it looks like I need a PowerMac for it.
MACFORMAT
Perhaps it really is time I dumped my trusty Classic. It'll be a shame but the future demands a firm sense of direction.
Deep inside the System Folder.
We must match these new 3D capabilities before the shops open! Any ideas, anyone?
You know, Chief, I think if I were to poke me finger into the Extension folder while wearing 3D glasses I could make...
EXTEN
Oh no! Herbert's been transformed into a stereogram!
Well he's done it! According to these figures our redrawing speed has risen by 500%!
We're safe again! I wonder to what amazing uses this new awesome power will be used!
Oh wow! Look at this! Three-dimensional naked ladies!

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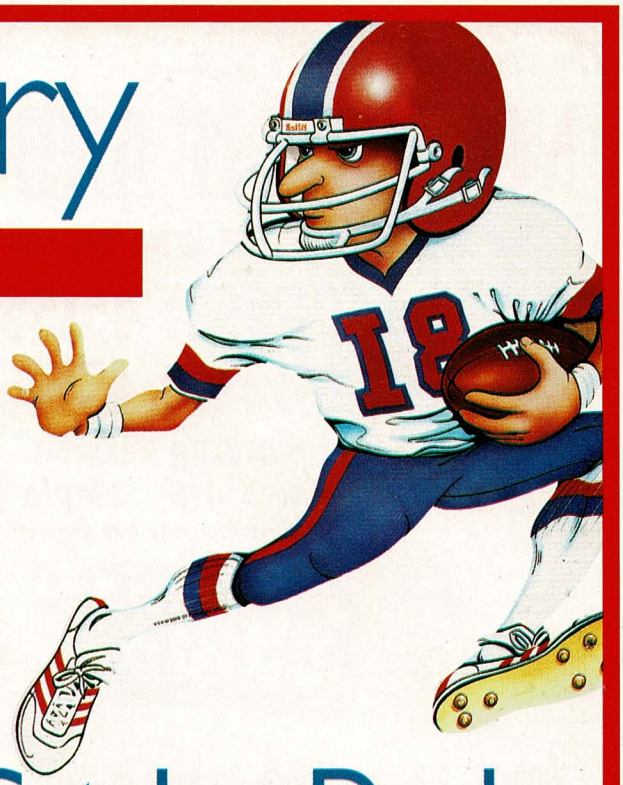

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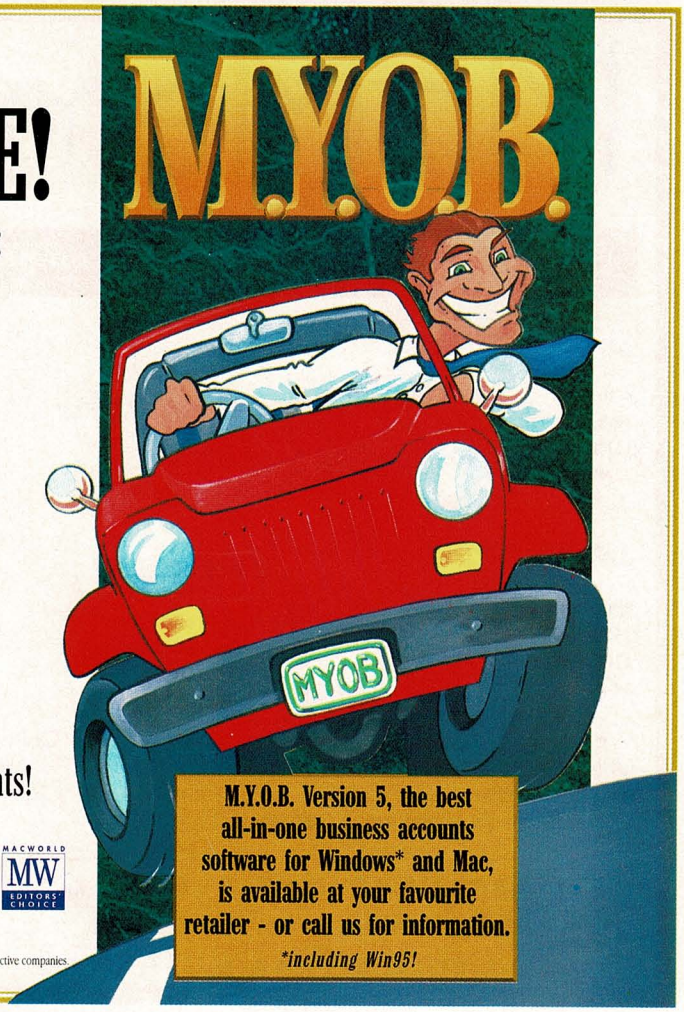

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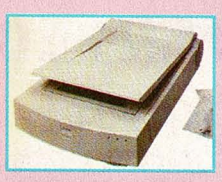

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ABC **MACFORMAT's circulation is independently audited by the Audit Bureau of Circulations**

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The bigger picture – from the Tiny Zone

Hello and welcome again to Tiny Zone, the small section of MACFORMAT that has the big picture. Forget for a moment about Apple's market share (up, worldwide) or profitability (paradoxically down – thanks to Apple's more aggressive pricing, there's less profit on each Mac) or possible takeovers or management shakeups. This isn't the business news. What these businessy measurements *mean* is that more and more people are buying Macs, especially in certain key areas of computer use, such as DTP (or 'professional pre-press'), where reports say over 76% of the computers used are Macs, or multimedia production, where the Mac's share is 43% – *much* more than the overall computer market share figure suggests. In the US in the first half of 1995, more Mac illustration and design software was sold than Windows ($87.3 million worth, as against $79.5 million worth on Windows). The Mac's domination in these areas is as clear as a Trinitron screen. Why? Not just because Mac software in these areas is so good (there's *Photoshop for Windows* too, you know), but also because the Mac still makes it easier to *use* your software. It doesn't get in the way – you don't have to learn 'computing' to do your job. (Other surveys confirm that Mac users are more productive as a result.) Apple are not standing still, with the new PCI Macs, QuickDraw 3D and other world-beating innovations. Rather than fret about Apple, remember why you bought a Mac: for raw power, ease of use, technological excellence and value for money, they're hard to beat. Enjoy it!

NEXT ISSUE

ARE YOU BEING SERVED?

A special report...

What kind of technical support can you expect when you buy Mac-related hardware? Why aren't sales staff more help? Why is Mac software so pricey? We tackle these questions and more in an in-depth report by a consumer-affairs expert.

Free 100-page DTP book

A definitive guide, from the basics to expert tips for *QuarkXPress*, *PageMaker* and *ClarisWorks*

Natural media revisited

Painter 4* and *Dabbler 2* reviewed, plus a new how-to series on image-manipulation, starting with cut-and-paste montage in *Color It!

PLUS Is creating a Web page now really as easy as DTP? *HoTMetaL Pro* and *PageMill* reviewed ■ The latest kids' programs ■ More on how to handle strange text formats ■ *Marathon 2* reviewed (this time for sure) ■ Huge Gamebusters special ■ And much, much more!

ARE YOU A WINNER?

Back in MACFORMAT 30, we gave you the chance to win a Hewlett-Packard 5MP mono laser printer, courtesy of Hewlett-Packard. It was the printer we rated as best of the bunch in our group test of mono lasers, and it is worth a cool £1,174. The lucky winner is Paul Sparrow of Knutsford, Cheshire. Congratulations, Paul!

In MACFORMAT 31, the big prize was a whopping 16Mb RAM upgrade for each of four winners, courtesy of upgrade specialists Performance Direct. And those RAM chips are going out to: Joe Blair of London N19; Bruce Hamilton of Lanark in Scotland; V B Elphick of Bridgend, Mid Glamorgan; and George Dawes of Barnsley, South Yorks. Well done!

(We're still judging the other competitions in those two issues – the 'Design a Web page' compo from MACFORMAT 30 and the *SoftWindows* compo in 31 – results next issue!)

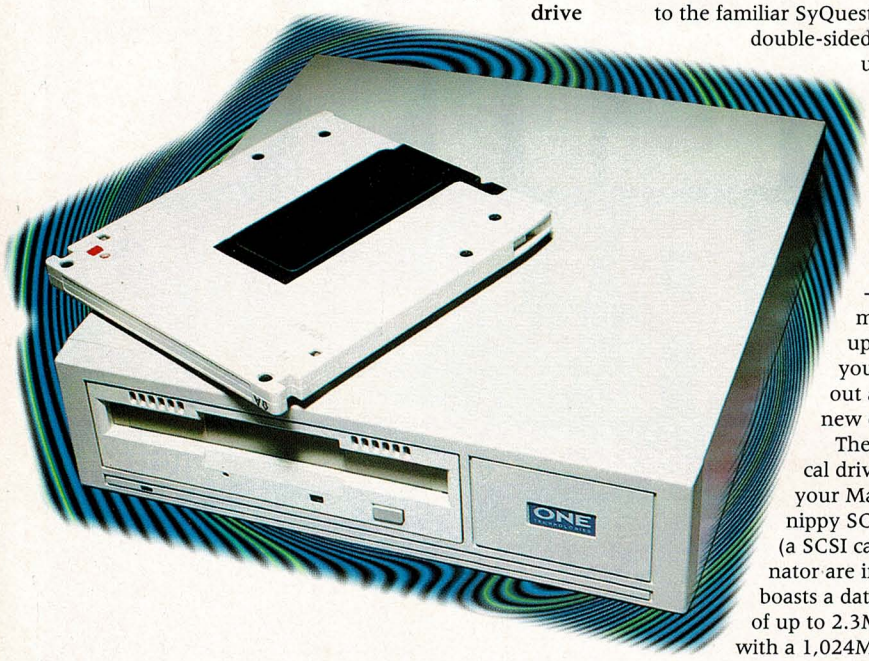
MACFORMAT 35 goes on sale on Thursday 15 February

Available with high density floppy disk or CD-ROM. Ask your newsagent to save you a copy or see the card insert in this issue for our special subscription offers

Win a 1.3Gb magneto-optical drive from ONE

Solve all your storage dilemmas! We have three 1.3Gb MO drives and cartridges from ONE Technologies to be won, each worth over £870, courtesy of Disc Direct.

Disk space is like money – you can never have too much of it. Whether you need to store large graphics files, QuickTime movies, multi-megabyte spreadsheets or just a hell of a lot of data, even the biggest hard disk is going to start filling up eventually. So who possibly could resist a drive that offers a massive 1.3 *gigabytes* of space – as much as two CD-ROMs, or more than 900 high density floppy disks – on a single removable magneto optical cartridge?



The 1.3Gb magneto optical drive from ONE Technologies is an external drive based on an IBM mechanism. In overall dimensions it's almost identical to the familiar SyQuest drive, but the double-sided cartridge it uses can hold a *lot* more data – formatted, 1,300 megabytes on each cartridge. That's probably more than your hard drive – but if you do manage to fill it up, not to worry, you can just pop it out and pop in a new one!

The magneto optical drive links up to your Macintosh using a nippy SCSI-2 connection (a SCSI cable and terminator are included) and boasts a data transfer rate of up to 2.3Mb a second, with a 1,024Mb onboard cache buffer to speed up read and write operations.

Disc Direct are bringing these mighty drives to the UK market for just £822 (plus around £54 for each 1.3Gb cartridge – which compares very well to a 200Mb SyQuest cartridge, which typically costs around £65). Or you could win one right here – we have *three* ONE Technologies magneto optical drives, complete with 1.3Gb cartridges, to be won, all courtesy of Disc Direct.

To win one of these brilliant prizes, all you have to do is answer the three simple questions below and send us your entry on a postcard or the back of a sealed envelope. The closing date is Friday 23 February 1996.

The Rules

Employees of Disc Direct, Future Publishing Ltd or associated companies, and their families, are not eligible to enter. Multiple entries are not allowed, unless on a mass storage medium – you know, any old hard drive you happen to have lying around, or a SyQuest cartridge... The editor's decision is final, no correspondence will be entered into, and there is no cash alternative. Please state if you don't want your name added to a mailing list. **MF**

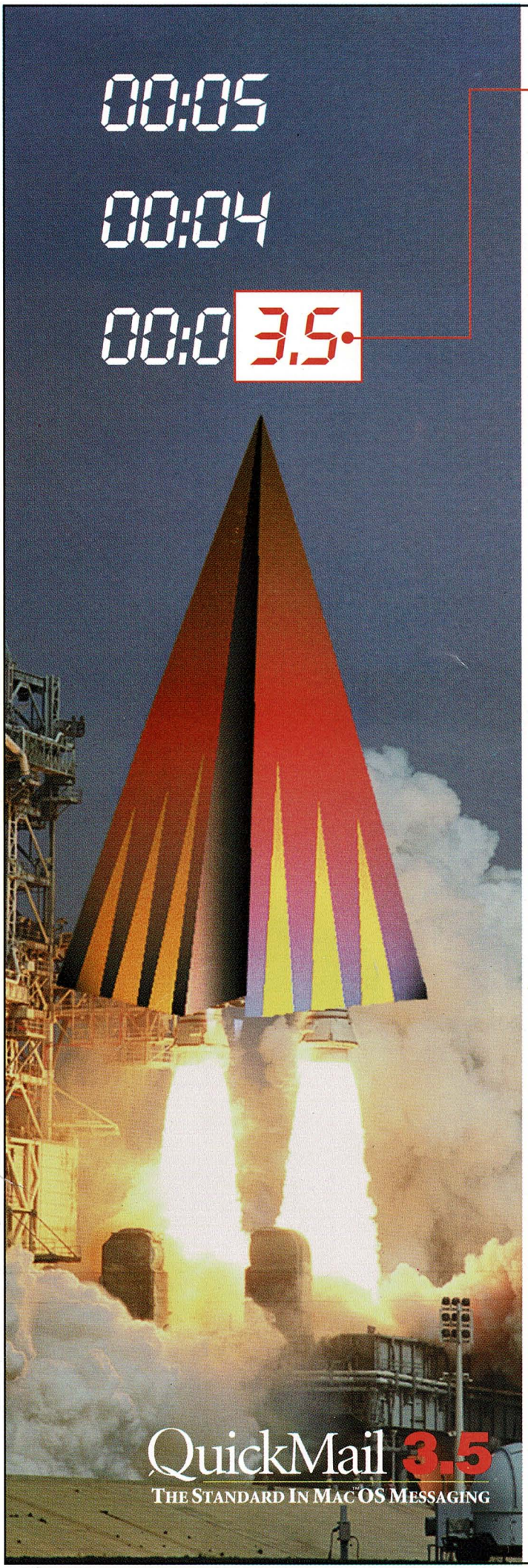
THE QUESTIONS

1. The ONE Technologies MO drive holds up to 1.3Gb of data on each cartridge. That's as much data as:
(a) Two full CD-ROMs
(b) More than 900 high density floppy disks
(c) About 1,625 double density floppy disks
(d) All of the above

2. When you're referring to storage devices, what does MO stand for?
(a) Magneto optical
(b) Medical Officer
(c) Modus Operandi

3. What size is the removable cartridge used in the ONE Technologies 1.3Gb MO drive?
(a) 3.5 inch
(b) 5.25 inch
(c) 640 x 480 pixels

Easy, right? If you need any help, turn to this issue's data storage feature, starting on page 61. Then send your answers on a postcard or the back of a sealed envelope to: 'It's the ONE Technology for Me' Compo, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.



LAUNCH

QuickMail 3.5 Takes Flight!

With the release of QuickMail 3.5, CE Software has once again set a new standard in E-mail power, functionality, and ease of use.

New in QuickMail™ 3.5...

Drag & Drop Functionality
Handling electronic mail has never been easier! Simply "drag," then "drop" E-mail messages on the button bar or in the appropriate file folder to perform the desired action.

Cross-Platform Stylised Text
To add personality or style to any message, text can be customised by font, size, or colour. Stylised text flows seamlessly between Macintosh™ and Windows clients.

Server-Based MailManager
Now QuickMail users can automate mail management even when disconnected from the network. QuickMail 3.5 has added server-based rules to its client-based rule capabilities.

New QuickConference
Included with QuickMail 3.5 as a standalone application, the all-new QuickConference™ is the perfect collaborative tool for all-day brainstorming and virtual meetings. It will even run in the desktop "background"!

Administrative Enhancements
QuickMail 3.5 includes a more robust security module that allows the administrator to set parameters around password usage. There are also new utilities that aid in conserving available storage space on the QuickMail server.

FREE Internet Connectivity
QuickMail 3.5 now includes a 10-user non-stackable Intercall™ Internet UUCP (Unix to Unix Copy Protocol) gateway. Now connect QuickMail users to the information superhighway, to send and receive Internet E-mail. An unlimited user UUCP or SMTP* version is also available.

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2.9MB OF GAMES, UTILITIES AND APPLICATIONS!

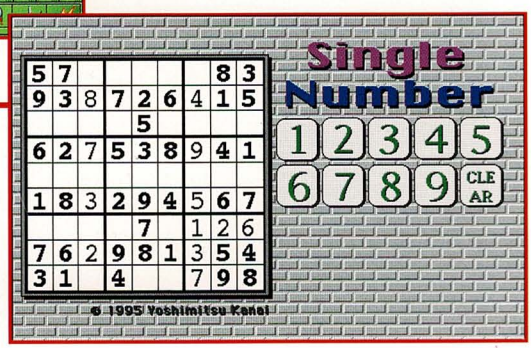
MACFORMAT

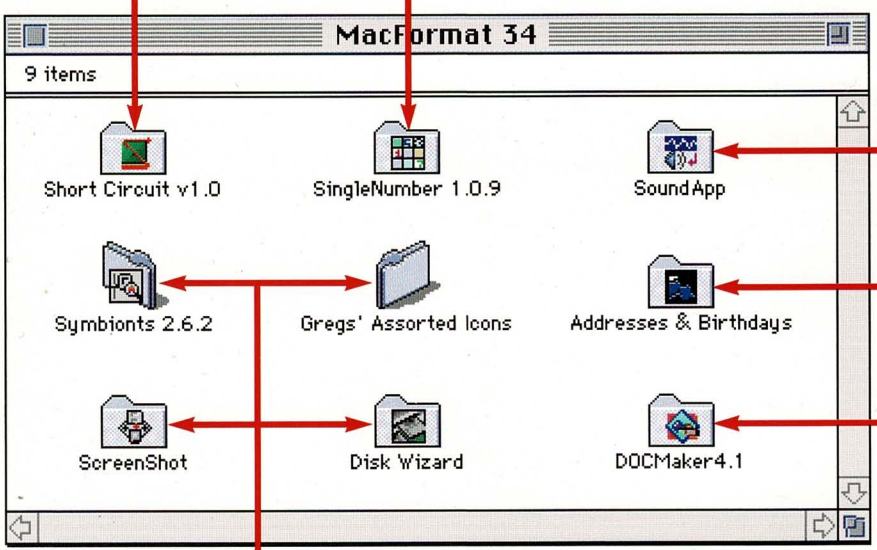
ON THE DISK THIS ISSUE...

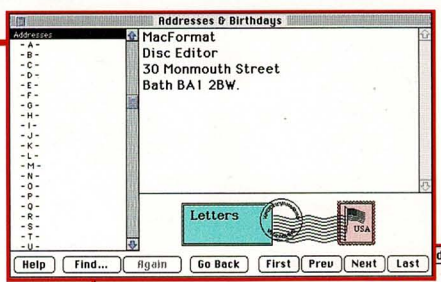
Create 60-chapter documents that anyone with a Mac can read; catalogue and index all your disks; or simply become hopelessly addicted to a mind-bending game – whatever your interests, this issue's Cover Disk has something for you!

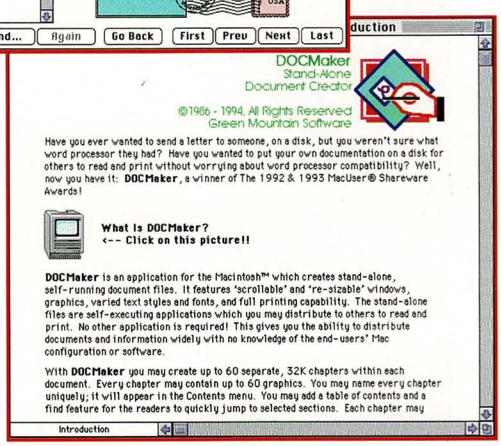
GAMES

More addictive than *Tetris* (possibly), tougher than *Pentominoes*, *Short Circuit* challenges you to link coloured tiles together to complete a circuit. Once you've made the link, the coloured pieces are removed from the board, opening new pathways to the other tiles. You'll have to be quick to win – it's a race against the clock! *SingleNumber* is a number-based mind-bender, with no time limit but plenty of thought required to fill in all the empty spaces without repeating numbers.








DOCMaker
Stand-Alone
Document Creator
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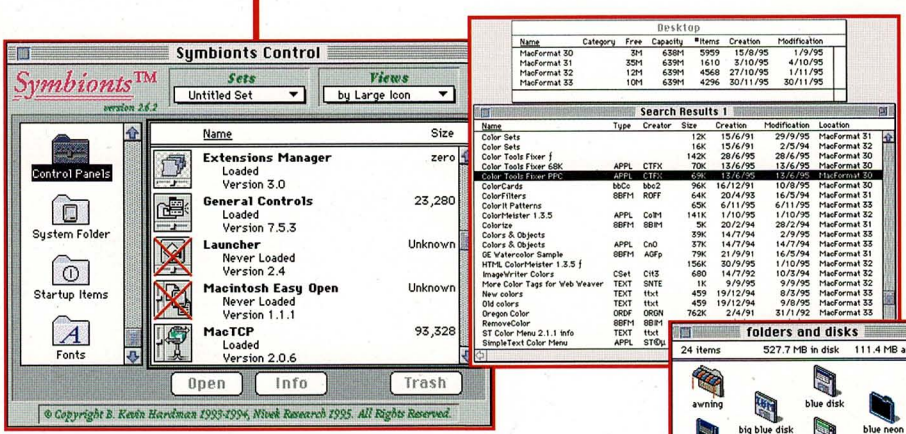
Green Mountain Software
Have you ever wanted to send a letter to someone, on a disk, but you weren't sure what word processor they had? Have you wanted to put your own documentation on a disk for others to read and print without worrying about word processor compatibility? Well, now you have it: DOCMaker, a winner of The 1992 & 1993 MacUser® Shareware Awards!
What is DOCMaker?
<-- Click on this picture!!
DOCMaker is an application for the Macintosh™ which creates stand-alone, self-running document files. It features 'scrollable' and 're-sizable' windows, graphics, varied text styles and fonts, and full printing capability. The stand-alone files are self-executing applications which you may distribute to others to read and print. No other application is required! This gives you the ability to distribute documents and information widely with no knowledge of the end-users' Mac configuration or software.
With DOCMaker you may create up to 60 seperate, 32K chapters within each document. Every chapter may contain up to 60 graphics. You may name every chapter uniquely; it will appear in the Contents menu. You may add a table of contents and a find feature for the readers to quickly jump to selected sections. Each chapter may
Introduction



UTILITIES

Disk Wizard is a top quality piece of shareware for cataloguing and indexing all your floppies, hard disks and even CD-ROMs. Once you've scanned a volume, its details are stored in a database and you can quickly find any files by using a simple Find File operation. *ScreenShots* is a versatile screen capture utility, which gives you a range of options for grabbing your Mac's display just by pressing any key combination you specify. *Symbionts* keeps an eye on things when your Mac starts up. This clever little Control Panel lets you know exactly how much of your valuable RAM is being eaten away by each of your System Extensions as they load. And Greg has done it again – the guy who brightened your Desktop with *Greg's Buttons* has designed a whole range of 3D icons you can use on any Mac.

APPLICATIONS

Want to create a stand-alone document that anyone can open? *DOCMaker* can do it! It creates files that anyone can double-click on to open – no more worries about whether the recipient has the right software. Files can have up to 60 chapters each, and you can use up to 60 graphics as links to move between sections. *SoundApp* is a handy program for playing and converting sound files. You can play any System sound, MOD file or WAV file, among others – simply drag the file onto the *SoundApp* icon. You can also convert sounds files from one format to any other. If you need to get your life organised, what could be handier than an easy-to-use address book application? *Addresses & Birthdays* runs in just 80K of RAM, and it works on almost any Mac, in mono as well as colour.